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Foreshore 2020 and 2021 Monitoring Report (January 2020 – March 2021) Below Area 2 - Eastern Impounding Basin, Parkland Burnaby Refinery, Burnaby, BC

Parkland Refining (BC) Ltd.

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EXECUTIVE SUMMARY

AECOM Canada Ltd. (AECOM) has prepared this Foreshore Monitoring Report on behalf of Parkland Refining (B.C.) Ltd. (Parkland) for the Burnaby Refinery. The report summarizes the results of porewater quality monitoring and inspections conducted between January 2020 and March 2021 along the Foreshore area of Burrard Inlet located down slope from the Eastern Impounding Basin (EIB), Area 2 of the Parkland Burnaby Refinery (hereafter referred to as "the Foreshore Site"). This report fulfills reporting requirements in accordance with the Foreshore Passive Treatment System (FPTS) Monitoring and Maintenance Plan (MMP) and meets condition 43 in Permit 16-180 issued by the Vancouver Fraser Port Authority (VFPA). The report also fulfills conditions established by the British Columbia Ministry of Environment and Climate Change Strategy (ENV) and the VFPA in letters provided on April 25, 2018; May 19, 2020; and January 4, 2021 (ENV 2018a; ENV 2020a; VFPA 2021).

The objectives of the program were to:

1. Monitor for the presence of non-aqueous phase liquid (NAPL) and associated contaminants of concern (COCs) in Site porewater[1] monitoring wells.
2. Assess the performance of the FPTS's remedial treatment cells and oleophilic biobarrier (OBB).
3. Maintain the integrity of the Eastern and Western portions of the FPTS by inspecting the protective rip rap and cobbles, repairing or replacement of monitoring wells, and by managing vegetation as required in the FPTS MMP.

Non-Aqueous Phase Liquids and Sheens

Non-aqueous phase liquids (NAPL) and sheen observations in porewater wells have been collected at the Foreshore Site since 2011. Twelve select porewater wells were monitored for NAPL in June 2020 and September 2020. All thirty-three porewater wells were monitored for NAPL[2] in December 2020 and March 2021. During the 2020 and 2021 monitoring events, none of the gauged porewater wells associated with the FPTS contained an observable sheen, or a measurable thickness of NAPL (**Table 1**).

Standards and Contaminants of Concern

Analytical results for porewater samples collected in December 2020 and March 2021 were compared to Risk-Based Management Targets (RBMTs) for contaminants of concern (COCs) associated with the dissolved phase porewater in the vicinity of the former NAPL seeps. The RBMTs were accepted by ENV (formerly referred to as the Ministry of Environment [MoE]) in their letter dated August 28, 2014 (MoE 2014). SLR Consulting Canada Ltd. (SLR) derived RBMTs for the following COCs: benzene, ethylbenzene, toluene, xylenes (BTEX), benzo(a)pyrene, naphthalene, volatile petroleum hydrocarbons in water (VPH_w), light extractable petroleum hydrocarbons in water ($LEPH_w$), copper, and zinc.

Water Quality Results

Concentration data for dissolved phase COCs in porewater have been collected since September 2011 in the former NAPL seep area. Porewater samples were collected from each of the 33 porewater wells located on the Foreshore Site during two annual sampling events, as set out in the amended FPTS Monitoring and Maintenance Plan (AECOM 2019b). The annual sampling events were completed in December 2020 and March 2021. The annual 2021 monitoring event was moved from December 2021 to March 2021 to allow for the collection of porewater samples in the wet season during daylight hours. The analytical results from both events are presented in **Tables 2 to 5** and **Figures 2 to 5** of this report. Data collected since the FPTS was installed are also presented in **Graphs 1 to 8**. Analytical results from porewater samples collected at the Site prior to 2020 are included as **Appendix A**.

[1] The term porewater for post FPTS construction is generally used in this report to include water collected from all four types of Site monitoring wells: Up Gradient, Performance, Sentry, and Compliance Wells

[2] As per ENV Protocol 16, NAPL is considered to be present if a thickness greater than 2 mm is measured in a monitoring well. BC ENV, 2021. Protocol 16. Determining the Presence and Mobility of Nonaqueous Phase Liquids and Odorous Substances (Version 3.0). Victoria, BC. https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/protocols/p16_jan_2021_revisions_final_signed.pdf

During the 2020 and 2021 FPTS sampling events, the analytical results from all COCs were compared to their applicable RBMTs:

- Concentrations of BTEX, LEPHw, VPHw, benzo(a)pyrene, naphthalene, dissolved copper and dissolved zinc were below their applicable RBMTs for all samples collected from all 33 porewater wells.

Inspection of the Foreshore Passive Treatment System

The FPTS was visually inspected during quarterly inspection events between January 2020 and March 2021. Inspections indicate there are no significant deficiencies in the FPTS since it was constructed in 2017. The thickness of rip rap was observed to be a minimum of 1.4 meters in depth, with one exception, the rip rap around one of the Contingency Biodegradation Point CBP-6 was observed to have shifted exposing the base of the concrete protector. The layer of cobbles above the oleophilic biobarrier (OBB) surface was observed to be 0.4 meters deep in most places. Inspections have indicated, however, that there has been some thinning of the cobble mat securing the subsurface components of the FPTS at the contact point between the rip rap and cobble interface on the northern extents of the Eastern and Western FPTS. This has resulted in portions of the geogrid becoming exposed in some areas. Thinning of the cobble mat has also been observed on the western extent of the Western FPTS, the eastern extent of the Eastern FPTS. At the Eastern FPTS, the cobble mat is overlain by sand deposits washed from other areas along the foreshore. Vegetation was observed on top of the barrier near the southern boundary of the Foreshore Site. Some small weeds were observed on top of the treatment cells in December 2020, but roots were too shallow to cause damage. Attempts were made to remove vegetation encroaching on the FPTS at the time of inspection. Some overhanging vegetation from the Canadian Pacific Rail Right of Way is encroaching on the FPTS and may need to be cut in the future. Most Sentry and Compliance Wells are covered in barnacles and seaweed. Significant damage to monitoring wells was not observed.

Conclusions and Recommendations

Since construction of the FPTS, monitoring data indicate that the FPTS is operating as designed for mitigating the migration of COCs to ecological receptors and waters of Burrard Inlet based on:

- The absence of sheens or measurable NAPL within the Up Gradient, Performance, Sentry and Compliance Wells of the FPTS.
- Concentrations of dissolved phase COCs in all samples collected from all 33 monitoring are below their applicable RBMTs.

Based on the data collected post-construction of the FPTS, AECOM recommends continuing annual sampling of the FPTS in 2022. The annual sampling event should be completed in March as long as the Foreshore Site will be accessible during daylight hours. Elevated concentrations of LEPHw observed in Up Gradient Well PW17-16 have historically corresponded with sampling events completed in December. Elevated concentrations of COCs in porewater samples collected from Up Gradient and Sentry Wells have historically been observed between December and April. In the most recent 2020 and 2021 sampling, higher concentrations of COCs were observed in March 2021 compared to December 2020. Therefore, in order to monitor the highest concentrations, it is recommended the annual event be conducted in the first three months of 2022.

Based on inspections of the FPTS, AECOM recommends that additional cobbles be placed over exposures of the geogrid/filter fabric down slope of Sentry Wells on both the Eastern and Western FPTS. This recommendation is not considered to be urgent. The current condition of the FPTS is not anticipated to compromise the integrity of the FPTS.

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REPORT ACRONYMS

ACP	Activated Carbon Performance
AECOM	AECOM Canada Ltd.
ALS	ALS Laboratories
BC	British Columbia
BCELM	BC Environmental Laboratory Manual
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CBP	Contingency Biodegradation Points
CEPA	Canadian Environmental Protection Act
Chevron	Chevron Canada Limited
CMA	Canada Marine Act
COC	Contaminants of Concern
CPR	Canadian Pacific Railway
CSR	Contaminated Sites Regulation
CSR AW	CSR Aquatic Life Standard
DFO	Fisheries and Oceans Canada
DO	Dissolved Oxygen
DQO	Data quality objective
DSI	Detailed Site Investigation
DTP	Depth to Product
DTW	Depth to Water
EAZ	Ecologically Active Zone
EC	Environment Canada
EIB	Eastern Impoundment Basin
EMA	Environmental Management Act
ENV	BC Ministry of Environment and Climate Change Strategy
ESA	Eastern Seep Area
FPTS	Foreshore Passive Treatment System
HASP	Health and Safety Plan
HHERA	Human Health and Ecological Risk Assessment
HWR	Hazardous Waste Regulation
IRA	Interim Remedial Action
LCS	Laboratory control sample
$LEPH_w/HEPH_w$	Light/Heavy Extractable Petroleum Hydrocarbons in Water
m	metre
m/s	metres per second
mg/L	milligrams per litre
mL/min	millilitres per minute
mm	millimeter
MS	Matrix Spike
mV	millivolts
NAPL	Non-aqueous phase liquid
MMP	Monitoring and Maintenance Plan
OBB	Oleophilic biobarrier
OCP	Organoclay Performance
ORP	Oxidation Reduction Potential
PAHs	Polycyclic Aromatic Hydrocarbons
Parkland	Parkland Refining (B.C.) Ltd.
PER	Project and Environmental Review
PHCs	Petroleum Hydrocarbons
PCOC	Potential Contaminants of Concern
POV	Port of Vancouver
PSI	Preliminary Site Investigation
PVC	polyvinyl chloride
QA/QC	Quality Assurance/Quality Control
RBMT	Risk-Based Management Targets

RCM	Reactive Core Mat
RDL	Reported Detection Limit
RIB	Remote Impounding Basin
ROW	Right of way
RPD	Relative Percent Difference
SLR	SLR Consulting Canada Ltd.
SOP	Standard Operating Procedure
TD	Total Depth of the Well
TDS	Total Dissolved Solids
µg/L	micrograms per litre
URS	URS Canada Inc.
USL	Updated Screening Level
VFPA	Vancouver Fraser Port Authority
VPH_w	Volatile Petroleum Hydrocarbons in Water
WQG	Water Quality Guidelines
WSA	Western Seep Area

1. INTRODUCTION

AECOM Canada Ltd. (AECOM) has prepared this Foreshore Monitoring Report on behalf of Parkland Refining (B.C.) Ltd. (Parkland) Burnaby Refinery. The report summarizes the results of porewater quality monitoring and inspections conducted between January 2020 and March 2021 along the Foreshore area of Burrard Inlet located down slope from the Eastern Impounding Basin (EIB), Area 2 of the Parkland Burnaby Refinery (hereafter referred to as "the Foreshore Site") (**Figure 1**).

This report fulfills reporting requirements in accordance with the Foreshore Passive Treatment System (FPTS) Monitoring and Maintenance Plan (MMP) (AECOM 2017c), and to meet condition 43 in Permit 16-180 issued by the Vancouver Fraser Port Authority (VFPA 2017). Condition 43 in Permit 16-180 states "*The applicant shall provide VFPA all future environmental monitoring data and reports that are related to the Project until such time that environmental monitoring at the Project site is completed. Monitoring data and reports shall include, at minimum, monitoring as detailed in "Section 8: Performance Verification Plan" of the Applicant's Foreshore Remedial Action Plan dated October 27, 2016, within 30 days of each monitoring period. The Application shall also make monitoring reports available to Aboriginal groups and the BC MoE".* On January 22, 2018, Spencer Chaisson of VFPA responded to Leslie Southern of AECOM and confirmed that Condition 43 of Permit 16-180 has been modified to only require reporting on an annual basis, within 90 business days of the last sampling event of the year.

The FPTS was installed at the Foreshore Site between July 10 through October 30, 2017 and was designed and constructed to be the final remedial action to address any free-phase and dissolved phase hydrocarbon and sheens along the Foreshore of Burrard Inlet. The multicomponent FPTS is comprised larger eastern section and a smaller western section. The FPTS consists of permeable subsurface treatment cells for the mitigation of free-phase non-aqueous phase liquid (NAPL) and dissolved phase hydrocarbons in porewater and contains an oleophilic biobarrier (OBB) for the prevention of sheens. In total, 33 porewater monitoring wells were installed and sampled from 2017 through 2021 and twelve surface water sample locations were sampled in 2017 and 2018 at the Foreshore Site to assess the performance of the FPTS (AECOM 2017b; AECOM 2019a; AECOM 2020a).

In 2018, the British Columbia Ministry of Environment and Climate Change Strategy (ENV) established new conditions for the FPTS MMP in their letter dated April 25, 2018 (ENV 2018a). These conditions were met in the 2018 Annual Foreshore Monitoring Report (AECOM 2019a). In accordance with the recommendations included within the 2018 Annual Foreshore Monitoring Report, modifications were made to the FPTS Monitoring and Sampling Program for 2019 and onward. These changes were detailed in an amendment to the FPTS Monitoring and Maintenance Plan and summarized in the Foreshore 2019 Annual Monitoring Report (AECOM 2019b; AECOM 2020a).

The six conditions for the FPTS MMP requested by ENV in 2018 included the following:

1. Monitoring for the presence of NAPL must be completed in all porewater wells.
2. Porewater samples from the French drains (otherwise known as contingency biodegradation points [CBP]) within the barriers must be collected and analyzed for contaminants of concern (COCs) to verify that they are not acting as preferential pathways for contaminant migration.
3. Any changes to the sampling frequency or termination of parts or the whole of the sampling program requires the approval of ENV.
4. Notification of exceedances of COCs above RBMTs in Compliance Wells and the following Up Gradient and Sentry Wells (PW17-01, PW17-02, PW17-9, PW17-10, PW17-13, PW17-14, PW17-31 and PW17-32) must be provided to ENV in writing within 30 days. Exceedances of Protocol 11 Upper Cap Concentrations (ENV 2021) require immediate verbal and written notification to ENV.
5. Include in the Foreshore Annual Monitoring Reports:
    a. A summary of remedial activities undertaken during the reporting period;

   b. Assessment of overall remediation progress, including evaluation in comparison to the remediation plan and schedule;
   c. Interpretation of current and cumulative results from the monitoring program, including groundwater, surface water, soil, etc., as appropriate; and
   d. Supporting documentation (e.g. analytical reports, tables and figures, records of inspection, maintenance of treatment works, etc.).
6. Submit annual summary report from the date of the completion of the remediation works (October 31st).

Regarding condition No. 2, the collection of porewater samples from the French drains (i.e. CBPs) was discontinued in 2019. ENV was notified of this modification to the sampling program on May 9, 2019 (Parkland, 2019b); ENV provided approval on November 25, 2019 (ENV, 2019b).

Regarding condition No. 4, following recommendations made by AECOM in the Foreshore 2019 Annual Monitoring Report, ENV agreed to reduce the frequency of porewater sampling at the Foreshore Site from semi-annual to annual in 2020. This revision was based on the low concentration and stability of contaminants of concern (COCs) measured at the FPTS over three years and is documented in an email from Lavinia Zanini (ENV) to Chris Boys (Parkland) on May 19, 2020 (ENV 2020a).

Regarding condition No. 6, ENV agreed to coordinate annual reporting to coincide with the VFPA reporting requirements (ENV, 2018b). In January 2021, VFPA agreed to combine the results and analysis of 2020 and 2021 monitoring events into one report to be delivered to VFPA within 90 business days after 2021 event. This is documented in an email from Spencer Chaisson (VFPA) to Chris Boys (Parkland) on January 4, 2021 (VFPA 2021).

The post-construction FPTS monitoring program is detailed in the amended Foreshore MMP (AECOM 2019b).

2. BACKGROUND AND SITE DESCRIPTION

2.1 Previous Investigations

Chevron Canada Limited (Chevron) first observed NAPL seeps on the north, downward slope of the Parkland (formerly Chevron) Burnaby Refinery (Refinery) towards Burrard Inlet during an inspection on April 21, 2010. The seeps were immediately reported by Chevron to the Provincial Emergency Program (now Emergency Management BC) and addressed using soaker pads and booms. The source of the NAPL is unknown but believed to be associated with historical Refinery operations and the north process sewer (decommissioned in June 2011).

A Preliminary Site Investigation (PSI) and a Detailed Site Investigation (DSI) were performed at the Foreshore Site in June 2010 and April 2011, respectively (URS 2011a). The PSI and DSI determined that the NAPL seeps emanated from the sediment near the contact between the overlaying beach sand and underlying colluvium, near the high tide line at the base of the Canadian Pacific Railway (CPR) Right-of-Way (ROW) slope.

Following the DSI, two Interim Remedial Action (IRA) Barriers comprised of a sand-organoclay mixture and a CETCO Reactive Core Mat (RCM) were constructed and installed in the Western Seep Area (WSA) and Eastern Seep Area (ESA) in February and March 2011 (URS 2011b). The Eastern IRA Barrier was refurbished in March and April 2012 by extending the sand-organoclay down slope into the former RCM anchor trench.

Porewater, porewater ecologically active zone (EAZ) samples (containing water from wells that are located from ground surface to 1 metre [m] below ground surface [bgs]), surface water from Burrard Inlet, and ambient air samples, were collected from the Foreshore Site on a regular basis in accordance with the Foreshore Monitoring Plan until February 2015 (URS 2012).

In 2013, it was determined between Chevron(then-owner of the Parkland Burnaby Refinery), AECOM, SLR, and ENV that the two areas of concern on the Foreshore Site down slope of the EIB in Area 2 of the Refinery, would be dealt with through two projects: Project 1 covers the Foreshore Non-aqueous phase liquids (NAPL) former Seep Area, and Project 2 covers the Foreshore outside of the former Seep Area.

Since the development of the original 2012 Foreshore Monitoring Plan, amendments were requested to the sampling frequency and of the monitoring program (URS 2014a) to ENV. The amendments included the following:

1) reduction of bi-monthly NAPL monitoring to monthly for the remainder of 2014 and quarterly in 2015;

2) reduction of porewater sampling in the Project 1 Area to 62 monitoring wells;

3) elimination of porewater sampling in the Project 2 Area (except for monitoring well P18-4.5S);

4) discontinuation of surface water sample collection from the Reference Area; and

5) elimination of ambient air monitoring on the Foreshore Site.

These amendments were approved by ENV in February 2015 (MoE 2015) and carried forward into the 2017 monitoring program prior to construction of the FPTS. In December 2016, the ENV agreed that the concentrations of zinc in porewater from the lone Project 2 Area monitoring well P18-4.5S were attributed to a buried metal object (ENV 2016a), thus the monitoring well was removed from the 2017 monitoring program.

2.1.1 Foreshore Well Decommissioning

In July 2019, 35 historical monitoring wells were decommissioned at the Foreshore Site. The historical wells in Project 1 became redundant due to the installation of new, better protected wells in 2017 as part of the construction of the FPTS. The historical monitoring wells in Project 2 and down slope of the Remote Impounding Basin (RIB) Cell C showed no Refinery-related impacts (URS 2014a, AECOM 2015, AECOM 2016a and AECOM 2016b). Details of the well decommissioning are presented in the Foreshore 2019 Annual Monitoring Report (AECOM 2020a).

2.2 FPTS Construction

Construction of the FPTS was performed from July 10 through October 30, 2017. The FPTS construction followed the ENV supported Foreshore Remedial Action Plan (AECOM 2016c) and in accordance with the Construction Environmental Management Plan (AECOM 2017a).

In summary, the FPTS consists of a larger Eastern section (60 m) and a smaller Western section (20 m) and consists of the following components:

- A subsurface treatment cell with Aquagate+Organoclay;
- An adjacent, down slope subsurface treatment cell with Aquagate+Powdered Activated Carbon;
- Baffles in the treatment cells;
- Contingency delivery piping into the treatment cells;
- Monitoring wells;
- A polyethylene liner to direct groundwater into the treatment cells;
- An Oleophilic Bio-Barrier; and
- Cobbles and a boulder embankment to protect the wells and other components.

In total, 33 porewater wells, divided into four distinct types (Up Gradient Wells, Performance Wells, Sentry Wells and Compliance Wells), were installed at the Foreshore Site in 2017 to assess the performance of

the FPTS (AECOM 2017b). Up Gradient wells are located up gradient of the treatment system, Performance Wells are located within the two treatment cells. Performance Wells are further subdivided into Organoclay Performance (OCP) Wells and Activated Carbon Performance (ACP) Wells; Sentry Wells are located down and cross slope of the treatment cells; and Compliance Wells are located down slope of the FPTS. The wells are presented in **Table A** and on **Figure 1**.

Table A. Foreshore Passive Treatment System Monitoring Wells

Well Type	Well Name
Up Gradient Wells (8)	PW17-01, PW17-04, PW17-09, PW17-13, PW17-16, PW17-21, PW17-26, and PW17-31
Performance Wells (8) OCP (4) ACP (4)	 PW17-05, PW17-17, PW17-22, and PW17-27 PW17-06, PW17-18, PW17-23, and PW17-28
Sentry Wells (8)	PW17-02, PW17-07, PW17-10, PW17-14, PW17-19, PW17-24, PW17-29, and PW17-32
Compliance Wells (9)	PW17-03, PW17-08, PW17-11, PW17-12, PW17-15, PW17-20, PW17-25, PW17-30, and PW17-33

2.3 Site Setting

2.3.1 Geology

The Foreshore Site is located on the southern intertidal foreshore of Burrard Inlet, north of Area 2 of the Burnaby Refinery (**Figure 1**). The former NAPL seeps were located at the base of a north facing benched slope. The upper portion of the slope (Upper Bench) is located within the Refinery fence and is the northern berm of the EIB. The topography north of the fence line drops sharply but flattens out in the vicinity of the Refinery property line (Lower Bench). The topography continues to drop past the Lower Bench to a pair of CPR railway tracks. There is a steep downward embankment north of the railway tracks onto the Foreshore. The intertidal zone then slopes more gently down into the inlet. The area is further described below.

According to the Geological Survey of Canada Map 1484A, Surficial Geology of New Westminster, BC, the Foreshore Site is located in an area of raised marine, deltaic and fluvial deposits (Capilano Sediments) comprised of poorly sorted sand and gravel formed during the Pleistocene. The sand and gravel is underlain by glacial drift deposits (Vashon Drift and Capilano Sediments) comprised of lodgement and minor flow till, lenses and interbeds of sub-stratified drift (sedimentary materials deposited directly from the ice or melt water of a glacier) overlying the Tertiary bedrock. Along the Upper Bench, fill material overlies the glacial materials.

Along the Lower Bench, a layer of fine-grained sand with some gravel and silt colluvium (loose bodies of sediment that have been deposited or built up at the bottom of a slope) overlies a grey to brown sandy silt till layer encountered at depths between 2 and 5 metres below ground surface (m bgs) (URS 2011a).

An approximately 4 m high, steeply sloping embankment (described above) leading up to the railroad, covered with rip rap facing along the lower portions, comprises the southern boundary of the Foreshore Site. The rip rap material is commonly boulders 0.25 to 0.75 m in diameter with scattered pieces up to 2 m in length. Beneath the rip rap, the sediments appeared to be a mixture of the fill, colluvium and till. The DSI determined the surficial geology of the Foreshore Site to be composed of fine to coarse beach sand, underlain by weathered colluvium, colluvium and till (URS 2011a).

2.3.2 Tidal Effects

The local tide fluctuates from approximately 0.5 to 4.5 m above the local datum. During low tides of 0.5 m, approximately 25 m of Foreshore is exposed while during high tides, the entire Foreshore is submerged.

A tidal study completed as part of the DSI (URS 2011a) determined that the porewater elevations parallel the tidal patterns and that mixing was occurring between saline surface water and porewater. A second tidal study was completed in June 2013 (URS 2014b). The results of the June 2013 study agreed with the previous DSI tidal study and noted that porewater generally flows north into Burrard Inlet and is tidally influenced.

2.3.3 Hydrogeology

Porewater on the Foreshore is derived from groundwater flow from up gradient areas, rain infiltration, marine surface water infiltration, and the intermixing of marine surface water through tidal fluctuations. On 1 April 2013, ENV released Technical Guidance 15 and on 1 November 2017, the ENV released Version 2 of Technical Guidance 15[3]. Both guidance documents define subsurface water in the vicinity of the Foreshore Site as follows:

- Groundwater: subsurface water laterally above the highwater mark (upland zone and dilution zone).
- Porewater EAZ and Porewater: subsurface water laterally below the high-water mark (aquatic receiving environment).

Previous reports referred to groundwater and porewater differently. The Foreshore 2013 Second Semi-Annual report (URS 2015) was the first report to be consistent with ENV Technical Guidance 15 and this current report follows these current definitions. The term porewater for post FPTS construction is generally used in this report to include water collected from all four types of Site monitoring wells: Up Gradient Wells, Performance Wells, Sentry Wells and Compliance Wells. As per ENV Procedure 8, Definitions and Acronyms for Contaminated Sites, porewater is defined as “the interstitial water within sediment”.

Given that no hydrological barrier separates the upper porewater EAZ from the lower porewater, these two units are considered one hydrostratigraphic unit and results in this report are not discussed separately.

2.3.4 Regional Climate Conditions

The total precipitation for the area was taken from the Area 1 Eton St Metro Vancouver (Burnaby North) Air Quality and Rainfall Station (T024), located at 49.2875º N, 123.0080º W, at 70 metres above mean sea level and approximately 1.7 kilometres to the west southwest of the Foreshore Site. Approximate total precipitation in 2020 and January to March of 2021 is summarized in **Table B** below:

Table B. Total Precipitation Recorded at Area 1 Eton Street (Burnaby North) Air Quality and Rainfall Station, T024 (Metro Vancouver 2021)

Month	Total Precipitation (mm)	
	2020	2021
January	539.2	146.6
February	152.6	74.2
March	148.6	64.0
April	43	-
May	128	-
June	111.4	-

[3] BC ENV, 2017a. *Technical Guidance 15: Concentration Limits for the Protection of Aquatic Receiving Environments (Version 2), Figure 1*. Victoria, BC. https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/technical-guidance/tg15.pdf

Month	Total Precipitation (mm)	
	2020	2021
July	65.4	-
August	62.8	-
September	65.4	-
October	67.6	-
November	153.8	-
December	196.4	-

3. REGULATORY CONTEXT

The *Environmental Management Act* (EMA) was brought into force on July 8, 2004. The applicable regulation under the EMA is the Contaminated Sites Regulation (CSR) updated to February 1, 2021. Federal environmental legislation applicable to Burrard Inlet adjacent to the Foreshore Site includes the *Canada Fisheries Act*. Although CSR standards are applicable to the Foreshore Site, site specific standards were developed through a risk assessment conducted in 2014. This risk assessment forms the basis for the development of the RBMTs applied at the Foreshore Site and discussed below.

3.1 Risk-Based Management Targets (RBMTs)

A Human Health and Ecological Risk Assessment (HHERA) was prepared for the Foreshore Site in February 2014 (SLR 2014a). This HHERA was used to determine Risk-Based Management Targets (RBMTs) for COCs associated with dissolved phase components in porewater associated with the NAPL seeps (SLR 2014b). The RBMTs were accepted by the ENV in their letter dated August 28, 2014 (MoE 2014).

The RBMTs were developed to be protective of aquatic plants and invertebrates at the community level and fish at the population level. The HHERA did not find any significant risk to human health; therefore, RBMTs were not developed for human receptors. SLR reviewed all potential contaminants of concern (PCOCs) for the Foreshore Site and derived RBMTs for the following COCs which were identified to be present at the Foreshore Site: PHC (benzene, toluene, ethylbenzene, xylenes [BTEX], volatile petroleum hydrocarbons in water [VPH_w], and light extractable petroleum hydrocarbons in water [$LEPH_w$]); PAHs (benzo(a)pyrene and naphthalene) and dissolved metals (copper and zinc). The HHERA only identified two metals as porewater COCs; therefore, for this report, the focus of the metals analysis is on copper and zinc.

For monitoring and sampling events completed in 2020 and 2021, porewater samples were compared against their applicable RBMTs per the amended Foreshore Monitoring and Maintenance Plan (AECOM 2019b).

The focus of post construction monitoring is on the water quality reported from Compliance Wells. Further information on the regulatory context of the Foreshore Site is presented in **Appendix B**.

4. OBJECTIVES

Objectives for the Foreshore Site monitoring program in 2020 and 2021 were in accordance with the amended Foreshore MMP (AECOM 2019b) and to meet condition 43 in Permit 16-180 issued by the VFPA (refer to Section 7 in VFPA 2017). The monitoring program also fulfills conditions established by ENV and the VFPA in letters provided on April 25, 2018; May 19, 2020; and January 4, 2021 (ENV 2018a; ENV 2020a; VFPA 2021) (refer to Section 2 of this report). In addition to the two annual sampling events completed in December 2020 and March 2021, five quarterly inspections of the FPTS were completed in March 2020, June 2020, September 2020, December 2020 and March 2021 to check the integrity of the FPTS.

Over the period of January 2020 to March 2021, the post-construction objectives were:

- Monitor for the presence of NAPL and associated COCs in Site monitoring wells;
- Assess the performance of the FPTS's remedial treatment cells and OBB; and,
- Maintain the integrity of the FPTS by checking and, where needed, replacing the protective rip rap and cobbles, repairing or replacement of monitoring wells, and by managing vegetation as required.

5. SCOPE OF WORK

The scope of work for the monitoring programs in 2020 and 2021, in accordance with the amended Foreshore MMP (AECOM 2019b), was as follows:

- Update the Foreshore Site Health and Safety Plan (HASP) based on existing HASPs and specific work area conditions.
- Ensure all required authorizations are obtained and followed.
- Inspect components of the FPTS, including the protective rip rap, protective cobbles, monitoring wells and vegetation and make repairs as necessary.
- Inspect and gauge 12 select Site porewater monitoring wells during quarterly site inspections on the Foreshore Site (starting June 2020).
- Record field observations of colour, clarity, pH, temperature, electrical conductivity, salinity, total dissolved solids (TDS), oxidation reduction potential (ORP), dissolved oxygen (DO), and turbidity.
- Collect porewater samples during two annual sampling events (December 2020 and March 2021) for chemical analysis for COCs: BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene, naphthalene, dissolved copper and dissolved zinc.
- Compare analytical results to RBMTs.
- Prepare this report.

This scope of work was developed jointly by Mr. Chris Boys, P.Geo of Parkland, Ms. Cindy Ott, P.Ag., Geo, P.Chem., and Mr. Michael Gill, P.Eng., CSAP of SLR Consulting Canada Ltd. (SLR), Mr. Robert Horwath, CA PG, and Ms. Leslie Southern, M.Sc., P.Ag., of AECOM.

The scope of work was completed by Mr. Justin Becker, E.I.T., Mr. Aaron Rysdale, Mr. Carny Wong, P.Ag, Ms. Rebecca McGovern, G.I.T., and Mr. Derek Brillinger, G.I.T. The report was prepared by Mr. Derek Brillinger and Ms. Leslie Southern. Senior reviews of this report were conducted by Ms. Bonnie Marks, M.A.Sc., P.Eng., CSAP and Ms. Lesley Reid, M.Eng., P.Eng., CSAP.

5.1 Modification to Scope of Work

In June 2020, the scope of work was modified by Leslie Southern (AECOM) and Christopher Boys (Parkland) to include monitoring of NAPL in 12 select monitoring wells (including eight Up Gradient Wells [PW17-01, PW17-04, PW17-09, PW17-13, PW17-16, PW17-21, PW17-26, and PW17-31] and four Organoclay Performance Wells [PW17-05, PW17-17, PW17-22, and PW17-27]) during quarterly inspections at the Foreshore Site. Each of the 12 wells were monitored for NAPL using an oil/water interface probe along with the collection of combustible headspace vapours using a flame ionization detector (e.g. Eagle RKI). The additional NAPL monitoring events were implemented based on ENV's request (ENV 2020a) to ensure the acceptable performance of the FPTS in between annual monitoring events.

5.2 Sampling Schedule

Annual sampling events were completed in December 2020 and March 2021. In 2021, the sample event was moved to March in order to collect porewater samples in the wet season during daylight hours. During each of these events, 33 porewater monitoring wells in the former NAPL seep areas associated with the FPTS were sampled.

5.2.1 NAPL Monitoring

During annual sampling events in December 2020 and March 2021 all 33 monitoring wells were monitored for NAPL. In June 2020 and September 2020 in conjunction with the quarterly inspection of the FPTS, 12 select monitoring wells were monitored for NAPL.

5.3 Monitoring Well Sampling Methodology

A total of 72 porewater samples, including six field duplicates, were collected in 2020 and 2021.

Porewater monitoring included recording the time of day, depth to water (DTW), depth to product (DTP, if any) and total depth of the well (TD). The DTW and DTP were measured using an interface probe. The interface probe was decontaminated between monitoring wells to prevent cross contamination. Reading of combustible headspace vapours were also collected from the top of the well immediately after the well seal (j-plug) had been removed using a flame ionization detector (Eagle RKI).

As in previous years, porewater samples were collected during low and mid tides when the Foreshore Site is above water. Although desirable to collect the porewater samples during a falling tide, in some cases, due to the short tidal window, a few samples were also collected during a slack tide. During the December 2020 event, the low to mid intertidal zones could only be accessed at night, therefore floodlights were used. Care was taken to direct the lights on the work areas only.

Porewater samples were collected from each monitoring well using dedicated high-density polyethylene and silicone tubing attached to a peristaltic pump, to ensure minimal entrainment of silt in the sample as well as minimal losses of volatile constituents. Prior to sample collection, field parameters including pH, temperature, electrical conductivity, salinity, TDS, ORP, DO, and turbidity were monitored through an approximately 500 mL flow-through cell and documented. Field parameters were recorded once a minimum of one flow-through cell volume (~500 mL) had been removed from the well and parameters had been deemed sufficiently stable by AECOM personnel. During purging and sample collection, care was taken to remove water from near the top of the water column to minimize any disturbance and subsequent entrainment of solids near the base of the well.

Interface probes, used to gauge different sample locations, were decontaminated between locations as follows:

- Washed external and internal surfaces of the sampling equipment with amended water[4]; scrubbed as necessary to remove dirt, grime, grease, and oil;
- Rinsed with de-ionized water; and
- Double rinsed with de-ionized water.

6. RESULTS

The data shown in this report represents monitoring and sampling events completed between January 2020 and March 2021 and are presented in **Tables 1 to 5** and **Figures 2 to 5**. Data collected since the FPTS was installed are also presented in **Graphs 1 to 8**. Porewater and surface water analytical data collected at the Foreshore Site prior to 2020 are included as **Appendix A**.

6.1 Field Monitoring Results

During the monitoring completed between January 2020 and March 2021, none of the gauged wells associated with the FPTS contained a measurable thickness of NAPL[5]. Hydrocarbon films (NAPL with a thickness less than one millimetre) have not been observed in monitoring wells associated with the Foreshore Site since 2013.

Porewater monitoring data and observations are presented in **Table 1**; field parameters are presented in **Table 5**.

6.2 Porewater Analytical Semi-Annual Results

Porewater samples were collected from each of the 33 Foreshore porewater wells during two annual sampling events completed in December 2020 and March 2021.

Porewater samples were analyzed for BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene, naphthalene, dissolved copper, and dissolved zinc. The reported analytical results are summarized on **Tables 2 to 5** and presented on **Figures 2 to 5**. Copies of the 2020 and 2021 analytical laboratory reports are provided in **Appendix C**.

Porewater results were screened against the RBMTs. Data for the 2020 and 2021 sampling events are discussed in the following subsections.

6.2.1 Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons

6.2.1.1 Up Gradient Wells

Concentrations of BTEX, VPHw, LEPHw, benzo(a)pyrene and naphthalene in all porewater samples collected from the eight Up Gradient Wells located within the Eastern and Western FPTS treatment cells were below their respective RBMTs.

6.2.1.2 Performance Wells (OCP and ACP)

Concentrations of BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene and naphthalene in all porewater samples collected from the eight OCP and ACP Wells located within the Eastern and Western FPTS treatment cells were below their respective RBMTs.

[4] Amended water is a 0.5% solution of an environmentally friendly cleaner labelled Liquinox and de-ionized water.

[5] As per ENV Protocol 16, NAPL is considered to be present if a thickness greater than 2 mm is measured in a monitoring well. BC ENV, 2021. Protocol 16. Determining the Presence and Mobility of Nonaqueous Phase Liquids and Odorous Substances (Version 3.0). Victoria, BC. https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/protocols/p16_jan_2021_revisions_final_signed.pdf

6.2.1.3 Sentry Wells

Concentrations of BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene and naphthalene in all porewater samples collected from the eight Sentry Wells located cross and down slope of the Eastern and Western FPTS treatment cells were below their respective RBMTs.

6.2.1.4 Compliance Wells

Concentrations of BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene and naphthalene in all porewater samples collected from the nine Compliance Wells located in between, cross and down slope of the Eastern and Western FPTS were below their applicable RBMTs.

6.2.2 Metals Analysis

All porewater samples collected in 2020 and 2021 from the 33 porewater wells contained concentrations of dissolved zinc and copper below their applicable RBMTs.

7. QUALITY ASSURANCE/QUALITY CONTROL

In order to assure the integrity and reliability of the data collected, rigorous quality assurance quality control/ (QA/QC) protocols were observed. QA/QC protocols used by AECOM in undertaking the staged investigation and remediation of the Foreshore Site are presented in **Appendix D**.

No data quality outliers were reported by the laboratory for any parameters with RBMTs. It is AECOM's opinion that the analytical results for all parameters with RBMTs are considered reliable.

7.1 Precision

For the two semi-annual events, a total of six samples were duplicated in the field. Relative percent differences (RPDs) can only be calculated in instances where the concentration for either sample was less than five times the reported detection limit (RDL). For all duplicated samples, the concentrations of parent and duplicate samples were either below the RDL or less than five times the RDL in all but three sets of samples, outlined below:

- Reported concentrations for ethylbenzene in the primary sample and its duplicate (DUP-1), collected from PW17-16 in December 2020, had a calculated RPD of 42%.
- Reported concentrations for VPHw and benzene in the primary sample and its duplicated (DUP-3), collected from PW-16 in March 2021 both had a calculated RPD of 0%.
- Reported concentrations for dissolved copper in the primary sample and its duplicate (DUP-3), collected from PW17-22 in December 2020, had a calculated RPD of 2%.

The BC Environmental Lab Manual (BCELM) provides data quality objectives (DQO) for recommended laboratory duplicate RPDs (ENV 2020b). The BC ENV has provided guidance indicating that field RPDs within 1.5 times the laboratory RPDs as defined in the BCELM are acceptable (ENV 2016b). Therefore, acceptable lab RPDs are as follows:

- Water – Petroleum Hydrocarbons have acceptable laboratory RPDs of 45%; and
- Water – Metals have an acceptable laboratory RPDs of 30%.

All parameters with calculated RPDs were within the acceptable range for RPD values. Based on this guidance and the above results, the calculated RPDs for benzene, ethylbenzene, VPHw and dissolved copper in water are within acceptable limits.

7.2 Accuracy

Analytical accuracy was confirmed in a review of percent recoveries reported in the laboratory reports. Percent recoveries are obtained when the project laboratory analyzes samples with known concentrations and compares their analytical results to the known concentrations. The laboratory provided percent recoveries for the majority of the analyses. The reported Laboratory Control Sample (LCS) recoveries and Matric Spike (MS) sample recoveries for parameters with RBMTs were within laboratory QC limits. It is AECOM's opinion that the analytical results are valid with respect to accuracy.

7.3 Completeness

No samples were invalidated by project laboratory. Completeness for all samples collected for this project was 100%.

8. INSPECTION OF THE FORESHORE PASSIVE TREATMENT SYSTEM

The FPTS was visually inspected during five quarterly inspection events completed on the following dates:

- March 12, 2020
- June 22, 2020
- September 28, 2020
- December 8, 2020
- March 3, 2021

A detailed table of the inspection results has been included as **Table 6** and a photographic log has been included as **Appendix E**.

The inspections indicated that there has been some thinning of the cobble mat at the contact point between the rip rap and cobble interface. This has resulted in portions of the geogrid and geotextile exposed in some areas along the northern extent of both the Eastern and Western FPTS (refer to Photos 1-4 within **Appendix E**). During the most recent inspection, conducted on March 3, 2021, the exposures ranged from approximately 0.24 m to 8.2 m long and 0.02 to 0.6 m wide.

During the inspections completed in December 2020 and March 2021, the rip rap which had been placed around one of the Contingency Biodegradation Points (CBP-6) was observed to have shifted exposing the base of the concrete protector (refer to Photo 6 in **Appendix E**).

As part of the 2020 and 2021 FPTS inspections, test pits were advanced within the cobble mat of the Eastern and Western FPTS. Test pits were advanced to a depth where the liner was encountered or the maximum depth possible where ground conditions allowed for hand digging. Test pits advanced in the Eastern FPTS revealed sand overlying cobbles to a depth of between 0.39 to 0.52 m below grade, where the liner was encountered. Test pits advanced in the Western FPTS revealed sand overlying cobbles to a depth of between 0.38 to 0.63 m below grade, where the liner was encountered. Overall, the inspections indicated that there were no significant deficiencies associated with either the Eastern or Western FPTS.

Vegetation was observed on top of the barrier near Up Gradient Wells. Some small weeds were observed on top of the treatment cells in December, but roots were too shallow to cause damage. Attempts were made to remove vegetation encroaching on the FPTS at the time of inspections. Some overhanging vegetation from the Canadian Pacific Rail Right of Way is encroaching on the FPTS and may need to be

cut in the future. Most Sentry and Compliance Wells are covered in barnacles and seaweed. Significant damage to monitoring wells was not observed.

The rip rap and cobble mat of the FPTS are anticipated to shift over time because of tidal action. The exposed geogrid is being maintained; however, it has become exposed in the areas noted above. No significant concerns were noted during these inspections and the FPTS is performing as designed.

9. DISCUSSION

9.1 Distribution of Exceedances

For FPTS sampling events completed between 2017 and 2021, an exceedance refers to concentrations of BTEX, VPH_w, $LEPH_w$, benzo(a)pyrene, naphthalene, dissolved copper or dissolved zinc above their applicable RBMTs.

There were no exceedances of BTEX, VPHw, LEPHw, benzo(a)pyrene, naphthalene, dissolved copper or dissolved zinc in any samples collected during the 2020 and 2021 FPTS sampling events. Overall, this indicates that the treatment system is effective in addressing dissolved phase hydrocarbons in porewater and is operating as designed.

9.2 Concentration Trends Over Time

9.2.1 Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons

The reported concentrations of LEPHw, VPHw, and benzene have been plotted over time on **Graphs 1 to 8** to demonstrate their trends. For graphs displaying average concentrations, the number of samples used in the calculation of average concentrations for each sampling event is represented by “n” on each graph. Data has been plotted from porewater wells within each of the monitoring areas of the current FPTS, including:

- (A) Up Gradient Wells,
- (B) OCP Wells,
- (C) ACP Wells,
- (D) Sentry Wells, and
- (E) Compliance Wells

Graphs 1A through 1E demonstrate that the concentration of $LEPH_w$, averaged across each well type, was below its RMBT for all 13 sampling events between November 2017 and March 2021.

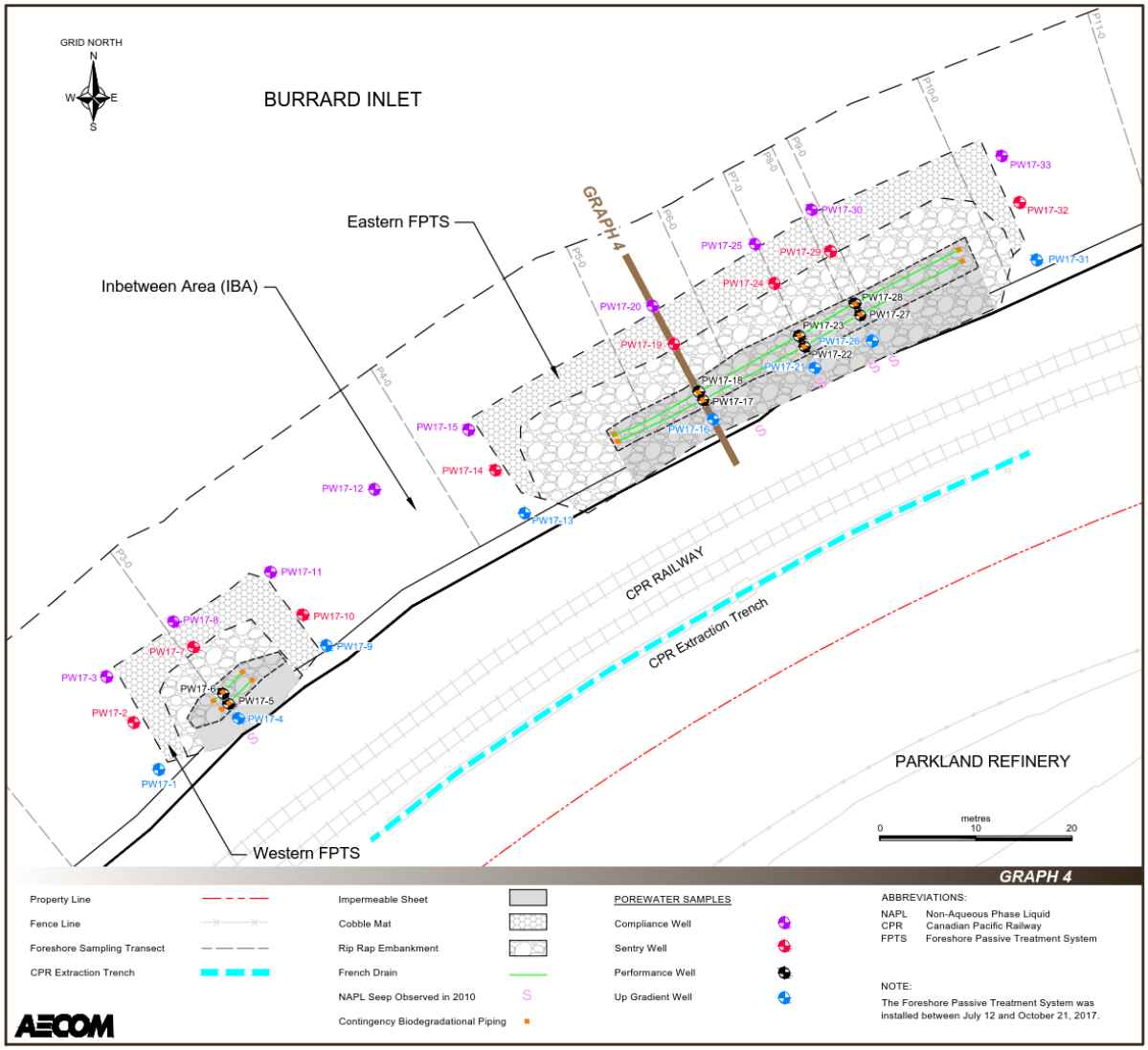
Graph 2 demonstrates that detectable concentrations of VPH_w in porewater were only present in Up Gradient Wells from January 2018 to March 2021 and OCP Wells in March 2018, June 2018, September 2018, December 2018, June 2019, December 2019 and March 2021.This indicates that the FPTS is effective at removing VPH_w from porewater, as concentrations of VPH_w above the RDL were not observed in wells down slope of the FPTS and concentrations of VPH_w generally decrease with travel through the FPTS.

Graph 3 indicates that average concentrations of benzene in porewater generally decrease after porewater has been transported through the FPTS, from Up Gradient to Sentry and Compliance Wells. During the last three sampling events, the average concentration of benzene has been higher in Sentry Wells compared to OCP Wells. During the same three sampling events, the average concentrations of benzene has been higher in OCP Wells compared to Up Gradient Wells. At this time, it is unclear why benzene concentrations are higher in OCP and Sentry Wells compared to Up Gradient Wells, however, the concentrations observed are significantly lower than the applicable RBMT for benzene.

No detectable concentrations of benzene were reported in any porewater sample collected from an ACP Well. The lack of concentrations of benzene above its RDL from porewater samples collected from ACP Wells and from the Compliance Wells indicate that the activated carbon is efficient at the adsorption of benzene from porewater and the overall trend indicates that the FPTS is performing as designed.

Graph 4 presents concentrations of benzene, $LEPH_w$, and VPH_w in samples collected from porewater wells along a north-south transect through the Eastern FPTS, from Up Gradient Well PW17-16 to Compliance Well PW17-20, as shown in **Figure A** below.

Figure A: Wells included in Graph 4 and Cross section A-A' (Figure 5), a north-south transect through the Eastern FPTS



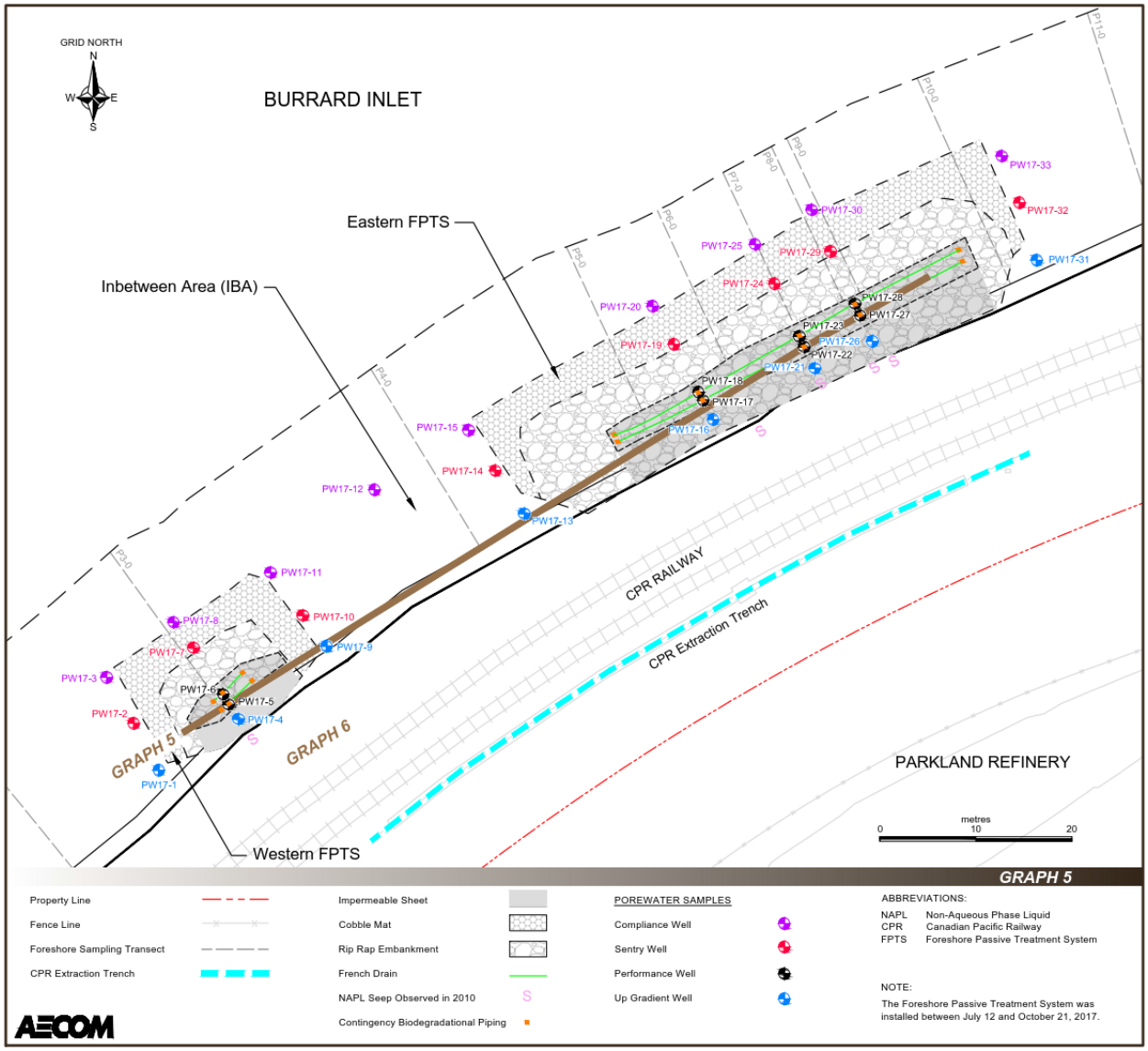
Graph 4 indicates that there are no substantial temporal trends in the concentration of benzene, VPH_w or $LEPH_w$ in porewater over time since the FPTS was installed. The graph does indicate a general decrease in concentrations of VPHw and LEPHw from the Up Gradient Well (PW17-16) to the down slope Compliance Well (PW17-20). Reported benzene concentrations show more variability from the Up Gradient (PW17-16) to Compliance Well (PW17-20). The samples with the highest concentration of benzene reported in March 2021, collected from this transect, were collected from Up Gradient Well PW17-16 (8.44 µg/L) and Sentry Well PW17-19 (8.23 µg/L). Historically, higher benzene concentrations have been observed in porewater samples collected from Sentry Well PW17-19 in sampling events completed during winter and spring. Porewater samples have not been collected in summer months since

June 2019 and, therefore, the graph shows higher benzene concentrations sustained across the last three sampling events.

The graph illustrates that only $LEPH_w$ has exceeded the RBMT in Up Gradient Well PW17-16 in 2018 and 2019. Reported concentrations of benzene, VPHw, and LEPHw were below their respective RBMTs in porewater samples collected from all other wells suggesting that the FPTS is efficient at addressing dissolved phase petroleum hydrocarbons in porewater.

Graph 5 presents concentrations of benzene, VPH_w, and $LEPH_w$ in samples collected from OCP Wells along an west-east transect (PW17-5, PW17-17, PW17-22 and PW17-27) through the Western and Eastern FPTS, as shown in **Figure B** below.

Figure B: Wells included in Graph 5, an east-west transect through Performance (OC) Wells

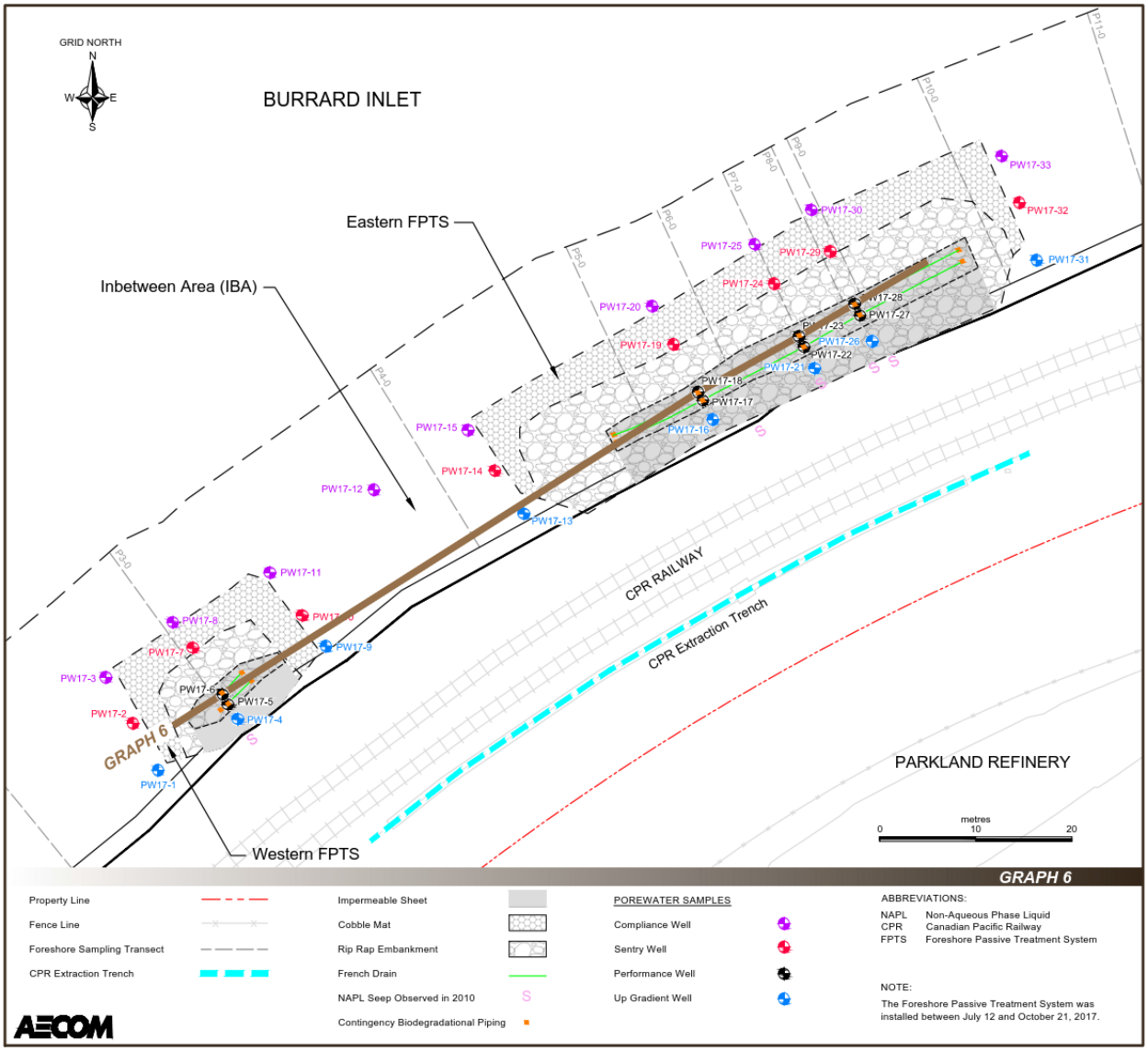


Graph 5 demonstrates that there were elevated concentrations of benzene and VPH_w in porewater samples collected from OCP Well PW17-17, with highest concentrations occurring in samples collected in June 2018.The reported concentration of VPHw and benzene in PW17-17 was higher in the porewater sample collected in March 2021 compared to the sample collected in December 2020. The concentrations of benzene, VPHw, and LEPHw were below their respective RDLs from the Western FPTS. Reportable

concentrations of benzene and VPHw were detected in OCP Wells in the Eastern FPTS but still below their respective RBMTs.

Graph 6 presents concentrations of benzene, VPH_w, and $LEPH_w$ in samples collected from ACP Wells along a west-east transect (PW17-6, PW17-18, PW17-23 and PW17-28), as shown in **Figure C** below.

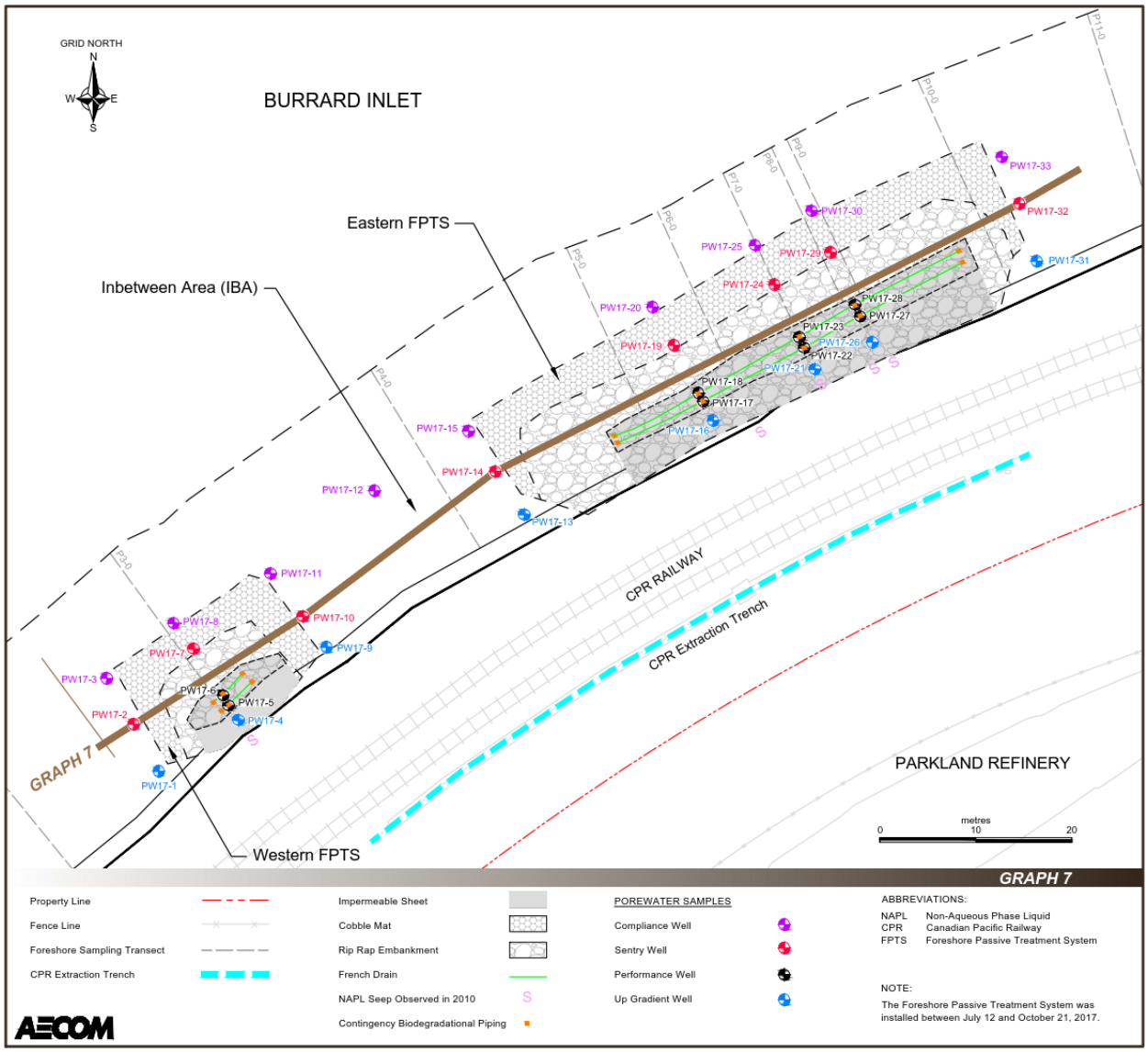
Figure C: Wells included in Graph 6, an east-west transect through Performance (AC) Wells



Graph 6 illustrates that there were no concentrations of benzene, VPH_w, and $LEPH_w$ above their respective RDLs in porewater samples collected from ACP Wells between November 2017 and March 2021. This suggests that that the activated carbon is efficient at the adsorption of PHCs across both the Western and Eastern FPTS.

Graph 7 presents concentrations of benzene, VPH_w and $LEPH_w$ in samples collected from Sentry Wells (PW17-2, PW17-10, PW17-14, and PW17-32) along a west-east transect, as shown in **Figure D** below.

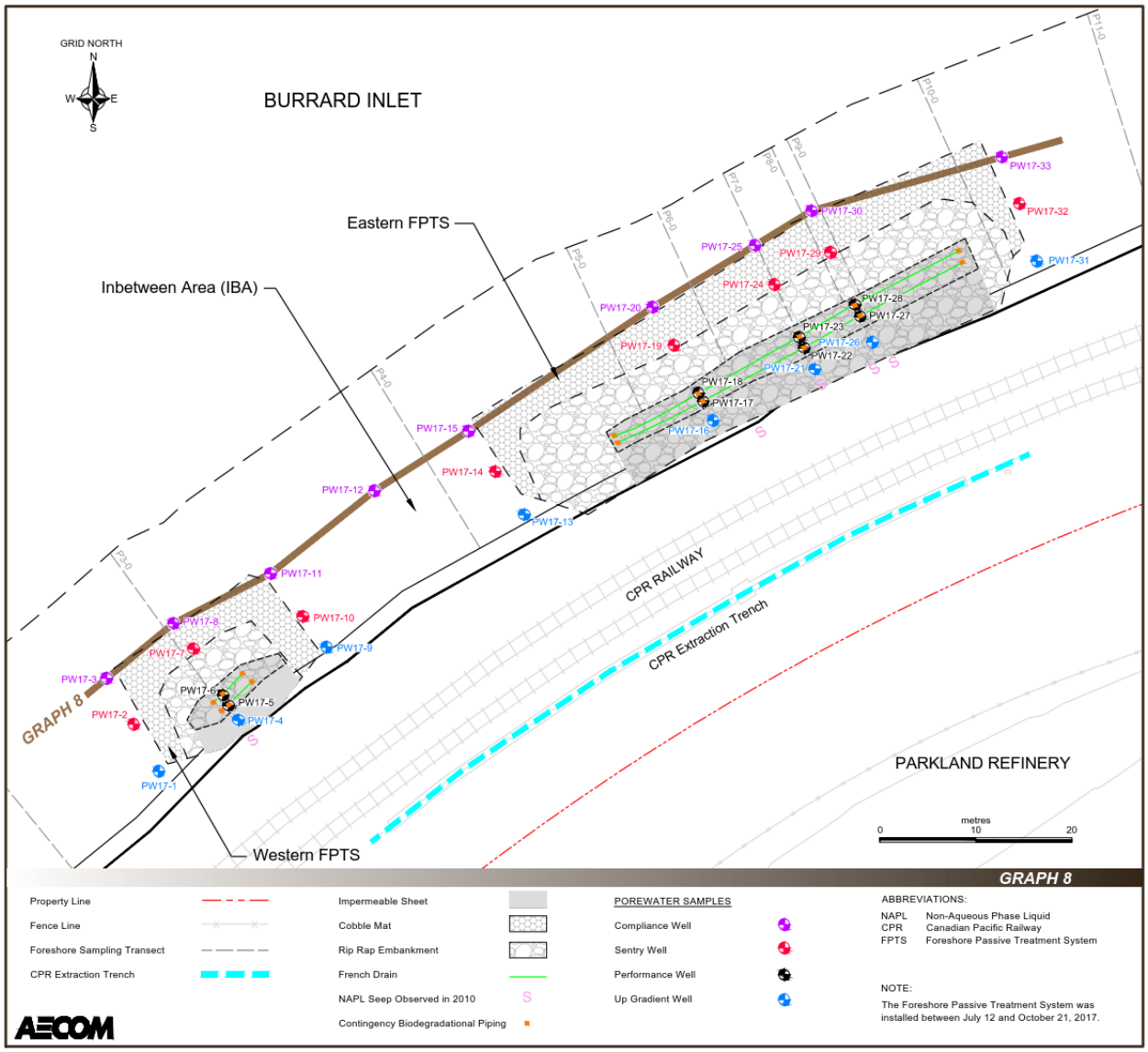
Figure D: Wells included in Graph 7, an east-west transect through Sentry Wells



Graph 7 illustrates that there were no concentrations of benzene, VPH_w and $LEPH_w$ above their respective RDLs in porewater samples collected from any of the graphed Sentry Wells between November 2017 and March 2021, with the exception of $LEPH_w$ in a sample collected from PW17-10 located on the east end of the Western FPTS in December 2018. This sample contained a concentration of $LEPH_w$ above its RBMT. A separate bottle, containing a porewater sample from the same sampling event, was analyzed at the laboratory and contained a concentration of $LEPH_w$ below its RDL. There is no trend associated with this reportable concentration $LEPH_w$ and further analysis of the sample indicated the $LEPH_w$ was likely from either field or laboratory cross-contamination and not representative of porewater conditions on the Foreshore Site (AECOM, 2019a).

Graph 8 presents concentrations of benzene, VPH_w and $LEPH_w$ in samples collected from Compliance Wells (PW17-3, PW17-8, PW17-11, PW17-12, PW17-15, PW17-20, PW17-25, PW17-30 and PW17-33) along a west-east transect, as shown in **Figure E** below.

Figure E: Wells included in Graph 8, an east-west transect through Compliance Wells



Graph 8 illustrates that there were no concentrations of VPH_w or $LEPH_w$ above their respective RDLs in porewater samples collected from any of the Compliance Wells between November 2017 and March 2021. No samples collected from Compliance Wells contained concentrations of benzene above its RDL, with the exception of three samples collected from PW17-30 in November 2017 (0.63 µg/L), December 2017 (0.55 µg/L), and April 2018 (32.5 µg/L). The concentrations of benzene were still far below its RBMT (2,100 µg/L) and, therefore, does not indicate a deficiency in the Eastern FPTS.

9.2.2 Dissolved Metals

AECOM assessed the concentration of dissolved metals in porewater samples collected in 2020 and 2021. Previously reported elevated dissolved copper concentrations detected in the January, February, or September 2018 sampling events were determined to likely be associated with contamination resulting from field filtering samples, or contamination during sample preparation and dilution at the laboratory (AECOM 2019a).

In 2019, 2020 and 2021 none of the porewater samples collected contained concentrations of dissolved copper or dissolved zinc above their respective RBMTs (6.2 and 90 µg/L, respectively). In 2020 and 2021, detectable concentrations of dissolved copper ranged from 0.2 to 6.18 µg/L and detectable concentrations of dissolved zinc ranged from 1.0 to 11.9 µg/L. The concentrations of dissolved copper and dissolved zinc observed in 2020 and 2021 was considerably less than the concentrations observed prior to the FPTS construction, which ranged from 0.2 to 35.9 µg/L and 1.0 to 7,400 µg/L, respectively.

9.3 Status of the FPTS

Since construction of the FPTS, monitoring data indicates that the FPTS is operating as designed for mitigating the migration of COCs to ecological receptors and waters of Burrard Inlet based on:

- The absence of sheens or measurable NAPL within the Up Gradient, Performance, Sentry and Compliance Wells of the FPTS;
- Dissolved phase COCs in all 33 monitoring are below their applicable RBMTs;
- The elevated dissolved copper concentrations detected in porewater in select 2018 sampling events were not observed in 2019, 2020 or 2021. Previous elevated dissolved copper concentrations are considered anomalous and do not appear to be related to the FPTS or Refinery operations; and,
- The monitoring and sampling program completed in 2020 and 2021 confirms that RBMTs have been met.

10. SUMMARY

This 2020 and 2021 monitoring report summarizes monitoring activities conducted January 2020 through March 2021 along the Foreshore Site.

Table C below summarizes the objectives and results from the monitoring activities conducted on the Foreshore Site between January and March 2021.

Table C. Summary of the Objectives and Results from the 2020 and 2021 Foreshore Monitoring Program

Objective	Result
Monitor for the presence of NAPL and associated COCs in Site monitoring wells	During monitoring events between January 2020 and March 2021, none of the porewater wells contained an observable sheen or measurable thickness of NAPL.
	No exceedances of the RBMTs were observed in 2020 or 2021 monitoring activities.
	The $LEPH_w$ exceedance in the porewater sample collected from Up Gradient Well PW17-16 in 2019 was not observed in 2020 and 2021. The previous exceedance does not indicate a lack of performance in the FPTS, as the well it was collected from is located up slope of the FPTS. $LEPH_w$ was not above its RDL in porewater wells located down slope of PW17-16, which provides evidence that the treatment system worked effectively in 2019. All available evidence suggests that the FPTS continued to function as designed from January 2020 to March 2021.
	Concentrations of dissolved copper above the RBMT in PW17-05, PW17-11, PW17-15, PW17-16, PW17-24, PW17-26, PW17-27, and PW17-28 detected during the January, February, and September 2018 sampling events were not observed in 2019, 2020 or 2021. This supports the conclusion that the exceedances were determined to likely be associated with contamination

Objective	Result
	resulting from field filtering samples, or contamination during sample preparation and dilution at the laboratory.
Assess the performance of the FPTS's remedial treatment cells and OBB	In 2020 and 2021, concentrations of PHCs and PAHs were not detected above the RDLs in any of the Compliance Wells. This trend demonstrates that the treatment system is operating as designed. The reported concentrations of COCs were below RBMTs in all samples collected in 2020 and 2021.
Maintain the integrity of the FPTS by checking and, where needed, replacing the protective rip rap and cobbles, repairing or replacement of monitoring wells, and by managing vegetation as required.	All visual inspections of the FPTS indicated that there were no significant deficiencies, including: rip rap thickness; thickness of cobbles above the OBB surface; vegetation growing above the treatment cells or OBB; and significant damage to monitoring wells (some minor chips to well casing and lids observed). Inspections completed in 2020 and 2021 documented ten exposures of the geogrid fabric and geotextile at the contact point between the rip rap and cobble interface of the Eastern and Western FPTS. The rip rap around one of the Contingency Biodegradation Points (CBP-6) was observed to have shifted exposing the base of the concrete protector.

Thirteen sampling events have been completed since construction of the FPTS in 2017. Since 2017, only two wells have reported concentrations above their RBMTs: 1) Up Gradient Well PW17-16, the only well in which the RBMT for LEPHw (300 µg/L) was exceeded (January, February, March, April and December 2018 and December 2019), with an average concentration of 311 µg/L and a maximum of 490 µg/L; and 2) Performance Well PW17-5 contained a concentration of dissolved copper reported above its RBMT (6.2 µg/L) in September 2018, with an average concentration of 3.23 µg/L and a maximum of 15.8 µg/L[6].

Since 2017, detectable concentrations of LEPHw, BTEX, VPHw, benzo(a)pyrene, and/or naphthalene have been found in nineteen (19) porewater wells associated with the Foreshore Site, but at concentrations well below their RBMTs. Concentrations of dissolved copper and/or zinc have been detected in 31 monitoring wells since April, 2018[6], but below their RBMTs, with the one exception previously noted in PW17-5**.** In 2020 and 2021, concentrations of LEPHw, BTEX, VPHw and PAHs were not detected above the RDLs in any of the Compliance Wells; detectable concentrations of dissolved copper and/or zinc were reported in eight of the nine Compliance Wells, but below the applicable RBMTs. The treatment system is effective in addressing dissolved phase hydrocarbons in porewater and is operating as designed.

11. RECOMMENDATIONS

Based on the data collected post-construction of the FPTS, AECOM recommends continuing annual sampling of the FPTS in 2022. Elevated concentrations of LEPHw observed in Up Gradient Well PW17-16 have historically corresponded with sampling events completed in winter and spring months. Elevated concentrations of COCs in porewater samples collected from Up Gradient and Sentry Wells have historically been observed between December and April. In the most recent 2020 and 2021 sampling, higher concentrations of COCs were observed in March 2021 compared to December 2020. Therefore, in order to monitor the highest concentrations, it is recommended the annual event be conducted in the first three months of 2022.

[6] Additional exceedances of dissolved copper were observed between December 2017 and March 2018. However, the elevated dissolved copper concentrations in porewater and surface water samples collected between December 2017 and March 2018 did not appear to be related to the FPTS or Refinery operations, but were likely associated with contamination resulting from field filtering samples, or to contamination during sample preparation and dilution at the laboratory(AECOM, 2019a). The average concentration calculated for PW17-5 includes only samples collected after March 2018.

Based on inspections of the FPTS, AECOM recommends that additional cobbles and/or boulders are placed over exposures of the geogrid/filter fabric down slope of Sentry Wells on both the Eastern and Western FPTS. Additional boulders should also be replaced around the base of CBP-6. AECOM understands Parkland plans to complete this work in 2021. The current condition of the FPTS is not anticipated to compromise the integrity of the FPTS.

12. STATEMENT OF QUALIFICATIONS AND LIMITATIONS

The attached Report (the "Report") has been prepared by AECOM Canada Ltd. ("AECOM") for the benefit of the Parkland Refining (B.C.) Ltd. (Client) in accordance with the agreement between AECOM and Client, including the scope of work detailed therein (the "Agreement").

The information, data, recommendations and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations");
- represents AECOM's professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to AECOM which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time.

AECOM shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. AECOM accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

AECOM agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but AECOM makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

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This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.

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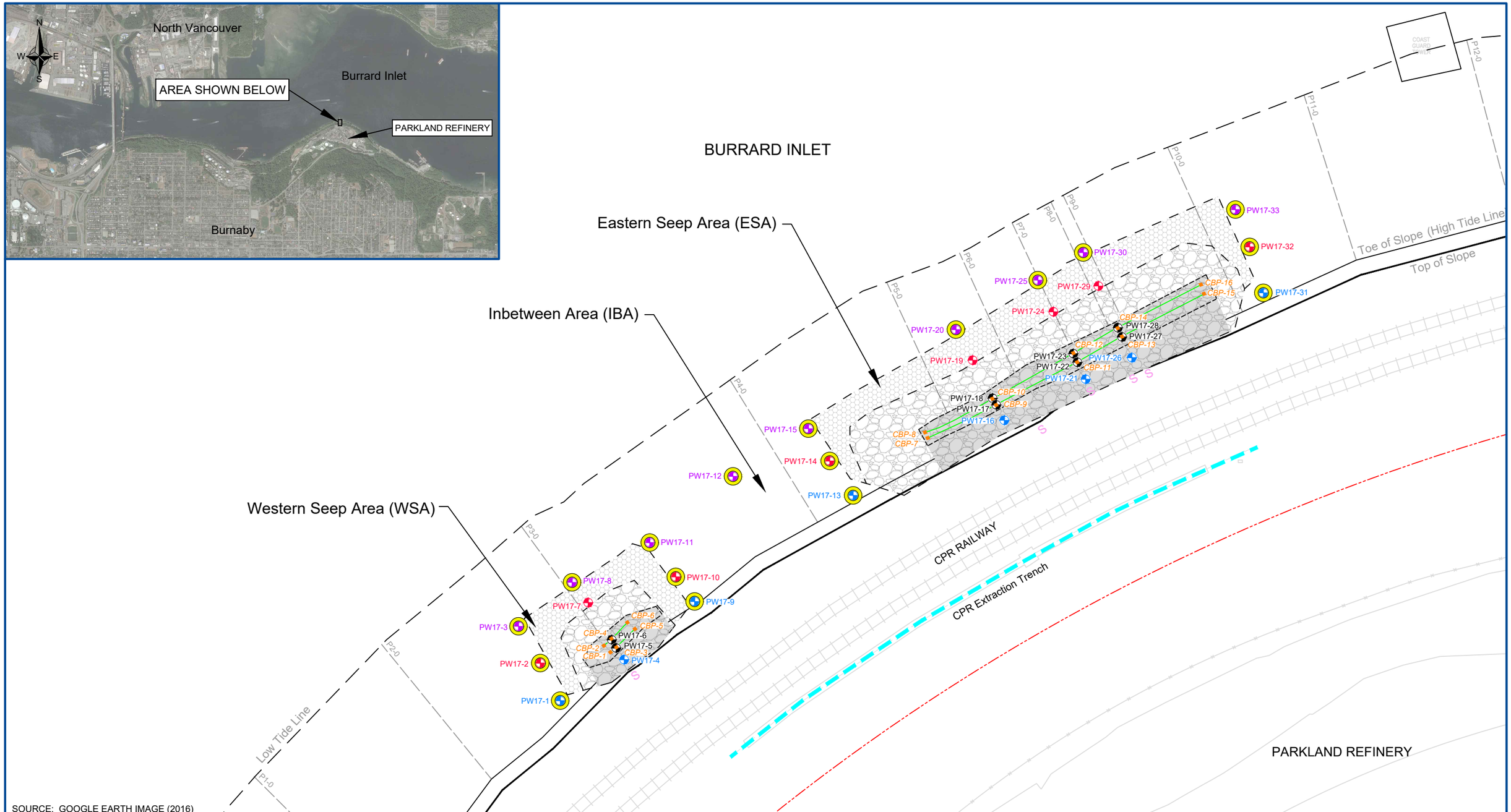
Figures



SOURCE: GOOGLE EARTH IMAGE (2016)

LEGEND:

- Property Line
- Fence Line
- Foreshore Sampling Transect
- CPR Extraction Trench
- Impermeable Sheet
- Cobble Mat
- Rip Rap Embankment
- French Drain
- NAPL Seep Observed in 2010
- Contingency Biodegradational Piping

POREWATER SAMPLES

- Compliance Well
- Sentry Well
- Performance Well
- Up Gradient Well
- ENV Requires Notifications[2]

ABBREVIATIONS:

COC	Contaminants of Concern
CPR	Canadian Pacific Railway
ENV	BC Ministry of Environment & Climate Change Strategy
NAPL	Non-Aqueous Phase Liquid
RBMT	Risk-Based Management Targets

NOTES:

1. The Foreshore Passive Treatment System (FPTS) was installed between July 12 and October 21, 2017.
2. BC ENV requires written notification within 30 days of exceedances of COCs above RBMTs in select wells.
3. BC ENV requires immediate verbal and written notification of COCs above Upper Cap Concentrations (Protocol 11) in all wells.

GRID NORTH

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SITE MAP AND FORESHORE SAMPLING LOCATIONS

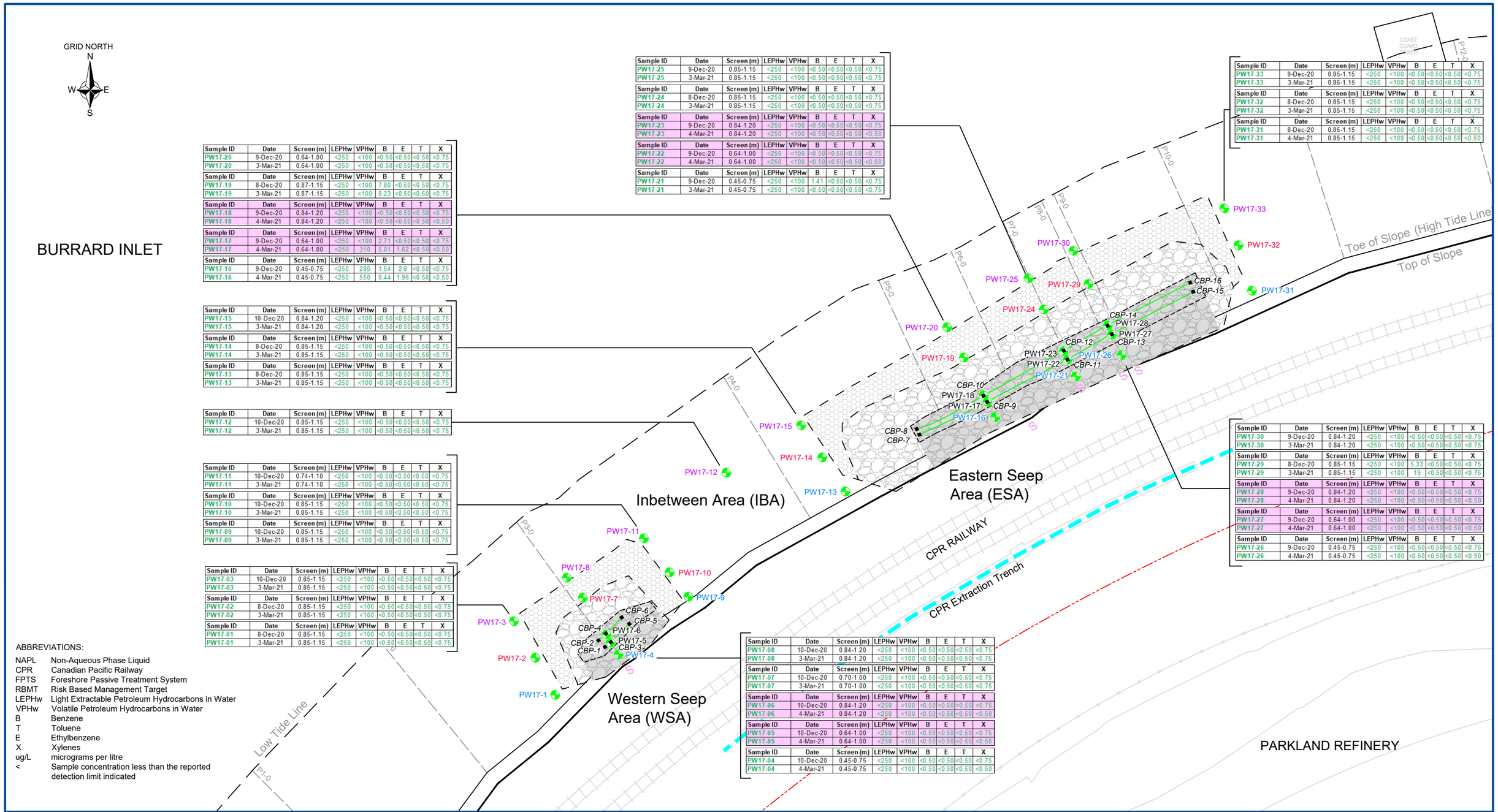
Foreshore 2020-2021 Monitoring Report,
Foreshore Below Area 2 - Parkland Refinery, Burnaby, B.C.

PARKLAND REFINING (B.C.) LTD.

DATE:	PROJECT NO.:	DRAWN BY:	REVISION NO.:	DRAWING NO.:
April 2021	60653584	NT/GS	0	FIGURE 1

AECOM

FILE NAME: C:\Users\georgiana.stegariu\OneDrive - AECOM Directory\Desktop\G.Stegariu\2020-2021 Parkland Refinery Foreshore Monitoring Figure Request\FIG01 - Site Map and Foreshore Sampling Locations 2021-04-13 - 60653584.dwg



Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-25	9-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-24	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-24	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-23	9-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-23	4-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-22	9-Dec-20	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-22	4-Mar-21	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-21	9-Dec-20	0.45-0.75	<250	<100	1.41	<0.50	<0.50	<0.75
PW17-21	3-Mar-21	0.45-0.75	<250	<100	<0.50	<0.50	<0.50	<0.75

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-33	9-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-32	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-32	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-31	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	4-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.50

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-20	9-Dec-20	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-20	3-Mar-21	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-19	8-Dec-20	0.87-1.15	<250	<100	7.80	<0.50	<0.50	<0.75
PW17-19	3-Mar-21	0.87-1.15	<250	<100	8.23	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-18	9-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-18	4-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-17	9-Dec-20	0.64-1.00	<250	<100	2.71	<0.50	<0.50	<0.75
PW17-17	4-Mar-21	0.64-1.00	<250	310	5.01	1.62	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-16	9-Dec-20	0.45-0.75	<250	280	1.54	2.8	<0.50	<0.75
PW17-16	4-Mar-21	0.45-0.75	<250	550	8.44	1.96	<0.50	<0.50

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-15	10-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-15	3-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-14	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-14	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-13	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-12	10-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-11	10-Dec-20	0.74-1.10	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-11	3-Mar-21	0.74-1.10	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-10	10-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-10	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-09	10-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-03	10-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-02	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-01	8-Dec-20	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-01	3-Mar-21	0.85-1.15	<250	<100	<0.50	<0.50	<0.50	<0.75

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-30	9-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-30	3-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-29	8-Dec-20	0.85-1.15	<250	<100	5.33	<0.50	<0.50	<0.75
PW17-29	3-Mar-21	0.85-1.15	<250	<100	19	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-28	9-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-28	4-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-27	9-Dec-20	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-27	4-Mar-21	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-26	9-Dec-20	0.45-0.75	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-26	4-Mar-21	0.45-0.75	<250	<100	<0.50	<0.50	<0.50	<0.50

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X
PW17-08	10-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-08	3-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-07	10-Dec-20	0.70-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-07	3-Mar-21	0.70-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-06	10-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-06	4-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-05	10-Dec-20	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-05	4-Mar-21	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.50
Sample ID	**Date**	**Screen (m)**	**LEPHw**	**VPHw**	**B**	**E**	**T**	**X**
PW17-04	10-Dec-20	0.45-0.75	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	4-Mar-21	0.45-0.75	<250	<100	<0.50	<0.50	<0.50	<0.50

ABBREVIATIONS:

NAPL	Non-Aqueous Phase Liquid
CPR	Canadian Pacific Railway
FPTS	Foreshore Passive Treatment System
RBMT	Risk Based Management Target
LEPHw	Light Extractable Petroleum Hydrocarbons in Water
VPHw	Volatile Petroleum Hydrocarbons in Water
B	Benzene
T	Toluene
E	Ethylbenzene
X	Xylenes
ug/L	micrograms per litre
<	Sample concentration less than the reported detection limit indicated

LEGEND:

Property Line
Fence Line
Foreshore Sampling Transect
Monitoring Well
CPR Extraction Trench
Impermeable Sheet
Cobble Mat
Rip Rap Embankment
French Drain
NAPL Seep Observed in 2010
Contingency Biodegradational Piping

POREWATER SAMPLES

Compliance Well	PW17-8
Sentry Well	PW17-7
Performance Well	PW17-6
Up Gradient Well	PW17-4

Sample concentration less than applicable RBMTs

Sample concentration greater than applicable RBMTs

NOTE:
1. The well symbol has been colour coded to identify exceedances in the most recent sampling event.

All units in µg/L	LEPHw	VPHw	B	E	T	X
RBMT	300	1500	2100	320	770	330

Colour coding of symbols is based on the most recent lab result. SLR derived Risk Based Management Targets (RBMTs) that were accepted by the ENV on August 28, 2014. Details regarding the RBMTs, and associated correspondence are included in Appendix B of this report.

PINK BACKGROUND = FPTS TREATMENT CELL SAMPLE

metres
0 10 20

AECOM

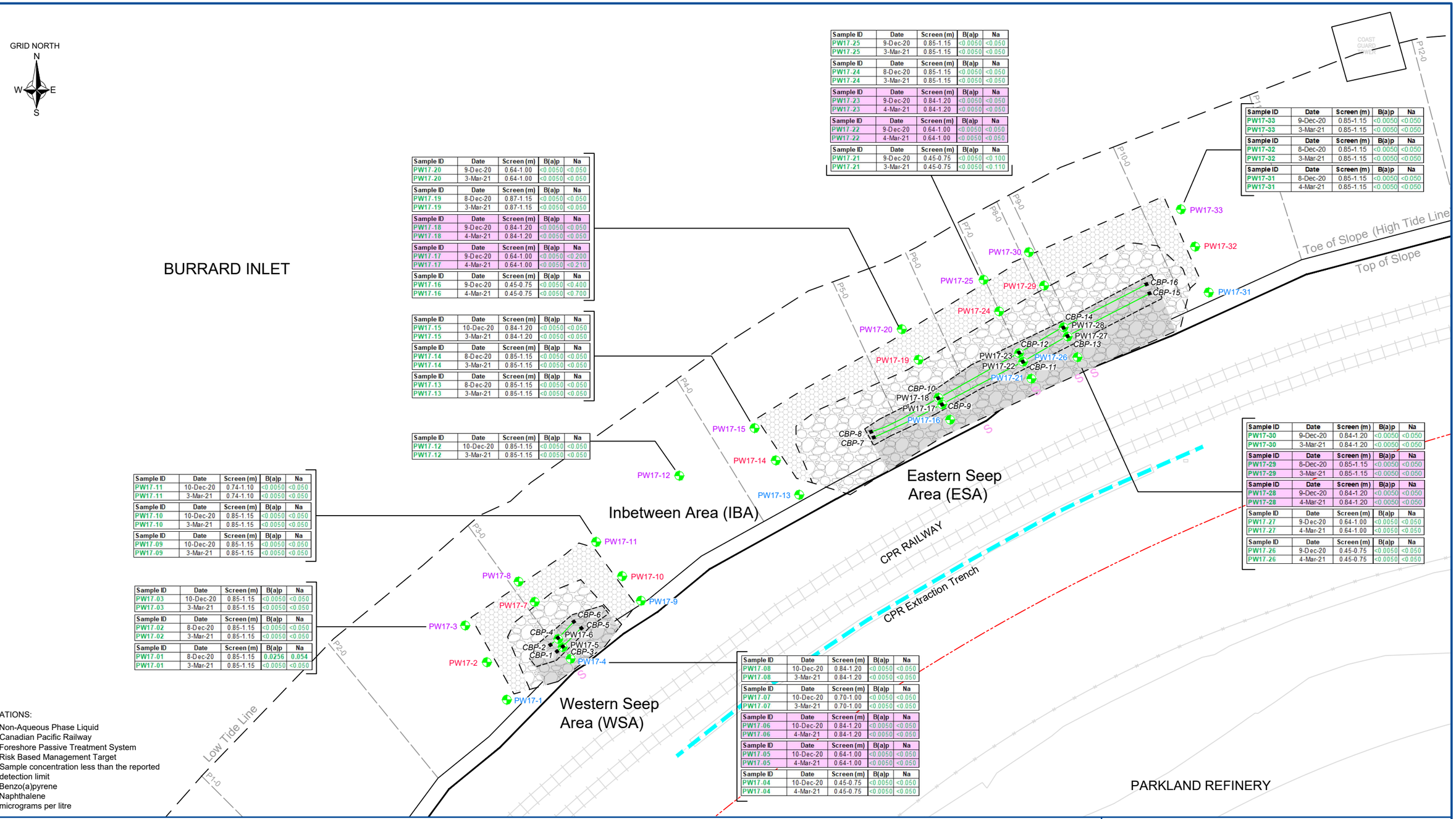
WATER ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS - 2020-2021

Foreshore 2020-2021 Monitoring Report,
Foreshore Below Area 2 - Parkland Refinery, Burnaby, B.C.

PARKLAND REFINING (B.C.) LTD.

DATE:	PROJECT NO.:	DRAWN BY:	REVISION NO.:	DRAWING NO.:
May 2021	60653584	NT/GS	0	FIGURE 2

FILE NAME: C:\Users\georgiana.stegariu\Downloads\2020-2021 Parkland Refinery Foreshore Monitoring Figure Request\FIG02 - Water Analytical Results for PHC (Dec 2020-Mar 2021) 2021-05-06 - 60653584.dwg



Sample ID	Date	Screen (m)	B(a)p	Na
PW17-25	9-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-25	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-24	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-24	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-23	9-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-23	4-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-22	9-Dec-20	0.64-1.00	<0.0050	<0.050
PW17-22	4-Mar-21	0.64-1.00	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-21	9-Dec-20	0.45-0.75	<0.0050	<0.100
PW17-21	3-Mar-21	0.45-0.75	<0.0050	<0.110

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-33	9-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-33	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-32	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-32	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-31	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-31	4-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-20	9-Dec-20	0.64-1.00	<0.0050	<0.050
PW17-20	3-Mar-21	0.64-1.00	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-19	8-Dec-20	0.87-1.15	<0.0050	<0.050
PW17-19	3-Mar-21	0.87-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-18	9-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-18	4-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-17	9-Dec-20	0.64-1.00	<0.0050	<0.200
PW17-17	4-Mar-21	0.64-1.00	<0.0050	<0.210

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-16	9-Dec-20	0.45-0.75	<0.0050	<0.400
PW17-16	4-Mar-21	0.45-0.75	<0.0050	<0.700

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-15	10-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-15	3-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-14	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-14	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-13	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-13	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-12	10-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-12	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-11	10-Dec-20	0.74-1.10	<0.0050	<0.050
PW17-11	3-Mar-21	0.74-1.10	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-10	10-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-10	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-09	10-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-09	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-03	10-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-03	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-02	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-02	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-01	8-Dec-20	0.85-1.15	0.0256	0.054
PW17-01	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-30	9-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-30	3-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-29	8-Dec-20	0.85-1.15	<0.0050	<0.050
PW17-29	3-Mar-21	0.85-1.15	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-28	9-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-28	4-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-27	9-Dec-20	0.64-1.00	<0.0050	<0.050
PW17-27	4-Mar-21	0.64-1.00	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-26	9-Dec-20	0.45-0.75	<0.0050	<0.050
PW17-26	4-Mar-21	0.45-0.75	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-08	10-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-08	3-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-07	10-Dec-20	0.70-1.00	<0.0050	<0.050
PW17-07	3-Mar-21	0.70-1.00	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-06	10-Dec-20	0.84-1.20	<0.0050	<0.050
PW17-06	4-Mar-21	0.84-1.20	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-05	10-Dec-20	0.64-1.00	<0.0050	<0.050
PW17-05	4-Mar-21	0.64-1.00	<0.0050	<0.050

Sample ID	Date	Screen (m)	B(a)p	Na
PW17-04	10-Dec-20	0.45-0.75	<0.0050	<0.050
PW17-04	4-Mar-21	0.45-0.75	<0.0050	<0.050

ABBREVIATIONS:

NAPL	Non-Aqueous Phase Liquid
CPR	Canadian Pacific Railway
FPTS	Foreshore Passive Treatment System
RBMT	Risk Based Management Target
<	Sample concentration less than the reported detection limit
B(a)p	Benzo(a)pyrene
Na	Naphthalene
ug/L	micrograms per litre

LEGEND:

- Property Line
- Fence Line
- Foreshore Sampling Transect
- Monitoring Well
- CPR Extraction Trench
- Impermeable Sheet
- Cobble Mat
- Rip Rap Embankment
- French Drain
- NAPL Seep Observed in 2010
- Contingency Biodegradational Piping

POREWATER SAMPLES

Compliance Well	PW17-8
Sentry Well	PW17-7
Performance Well	PW17-6
Up Gradient Well	PW17-4

- Sample concentration less than applicable RBMTs
- Sample concentration greater than applicable RBMTs

NOTE:
1. The well symbol has been colour coded to identify exceedances in the most recent sampling event.

All units in µg/L	B(a)p	Na
RBMT	0.28	44

Colour coding of symbols is based on the most recent lab result. SLR derived Risk Based Management Targets (RBMTs) that were accepted by the ENV on August 28, 2014. Details regarding the RBMTs, and associated correspondence are included in Appendix B of this report.

PINK BACKGROUND = FPTS TREATMENT CELL SAMPLE

metres 0 10 20

AECOM

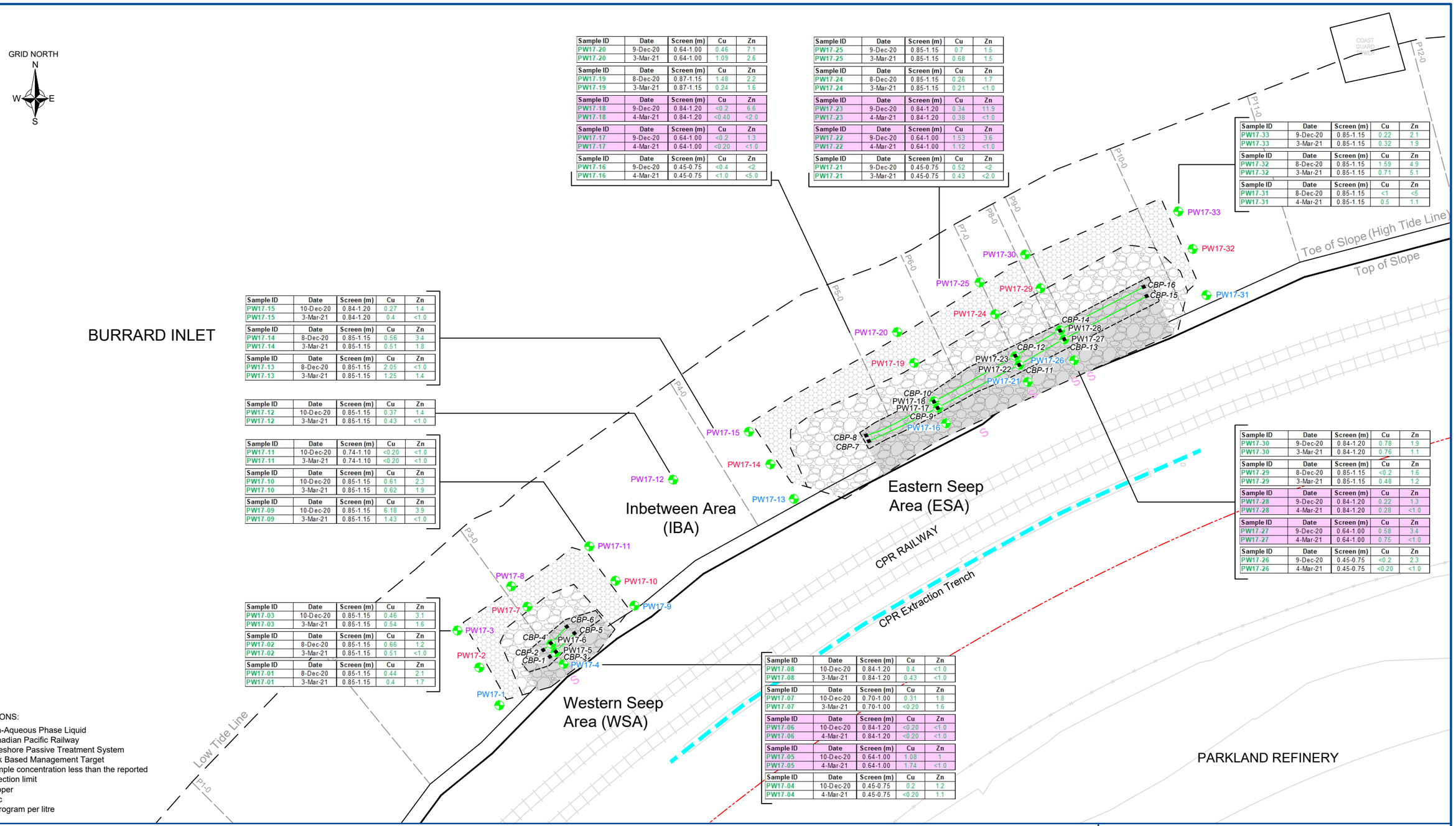
WATER ANALYTICAL RESULTS FOR POLYCYCLIC AROMATIC HYDROCARBONS - 2020-2021

Foreshore 2020-2021 Monitoring Report,
Foreshore Below Area 2 - Parkland Refinery, Burnaby, B.C.

PARKLAND REFINING (B.C.) LTD.

DATE:	PROJECT NO.:	DRAWN BY:	REVISION NO.:	DRAWING NO.:
May 2021	60653584	NT/GS	0	FIGURE 3

FILE NAME: C:\Users\georgiana.stegariu\Downloads\2020-2021 Parkland Refinery Foreshore Monitoring Figure Request\FIG03 - Water Analytical Results for PAH (Dec 2020-Mar 2021) 2021-05-06 - 60653584.dwg



Sample ID	Date	Screen (m)	Cu	Zn
PW17-20	9-Dec-20	0.64-1.00	0.46	7.1
PW17-20	3-Mar-21	0.64-1.00	1.09	2.6

Sample ID	Date	Screen (m)	Cu	Zn
PW17-19	8-Dec-20	0.87-1.15	1.48	2.2
PW17-19	3-Mar-21	0.87-1.15	0.24	1.6

Sample ID	Date	Screen (m)	Cu	Zn
PW17-18	9-Dec-20	0.84-1.20	<0.2	6.6
PW17-18	4-Mar-21	0.84-1.20	<0.40	<2.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-17	9-Dec-20	0.64-1.00	<0.2	1.3
PW17-17	4-Mar-21	0.64-1.00	<0.20	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-16	9-Dec-20	0.45-0.75	<0.4	<2
PW17-16	4-Mar-21	0.45-0.75	<1.0	<5.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-25	9-Dec-20	0.85-1.15	0.7	1.5
PW17-25	3-Mar-21	0.85-1.15	0.68	1.5

Sample ID	Date	Screen (m)	Cu	Zn
PW17-24	8-Dec-20	0.85-1.15	0.26	1.7
PW17-24	3-Mar-21	0.85-1.15	0.21	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-23	9-Dec-20	0.84-1.20	0.34	11.9
PW17-23	4-Mar-21	0.84-1.20	0.38	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-22	9-Dec-20	0.64-1.00	1.53	3.6
PW17-22	4-Mar-21	0.64-1.00	1.12	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-21	9-Dec-20	0.45-0.75	0.52	<2
PW17-21	3-Mar-21	0.45-0.75	0.43	<2.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-33	9-Dec-20	0.85-1.15	0.22	2.1
PW17-33	3-Mar-21	0.85-1.15	0.32	1.9

Sample ID	Date	Screen (m)	Cu	Zn
PW17-32	8-Dec-20	0.85-1.15	1.59	4.9
PW17-32	3-Mar-21	0.85-1.15	0.71	5.1

Sample ID	Date	Screen (m)	Cu	Zn
PW17-31	8-Dec-20	0.85-1.15	<1	<5
PW17-31	4-Mar-21	0.85-1.15	0.5	1.1

Sample ID	Date	Screen (m)	Cu	Zn
PW17-15	10-Dec-20	0.84-1.20	0.27	1.4
PW17-15	3-Mar-21	0.84-1.20	0.4	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-14	8-Dec-20	0.85-1.15	0.56	3.4
PW17-14	3-Mar-21	0.85-1.15	0.51	1.8

Sample ID	Date	Screen (m)	Cu	Zn
PW17-13	8-Dec-20	0.85-1.15	2.05	<1.0
PW17-13	3-Mar-21	0.85-1.15	1.25	1.4

Sample ID	Date	Screen (m)	Cu	Zn
PW17-12	10-Dec-20	0.85-1.15	0.37	1.4
PW17-12	3-Mar-21	0.85-1.15	0.43	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-11	10-Dec-20	0.74-1.10	<0.20	<1.0
PW17-11	3-Mar-21	0.74-1.10	<0.20	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-10	10-Dec-20	0.85-1.15	0.61	2.3
PW17-10	3-Mar-21	0.85-1.15	0.62	1.9

Sample ID	Date	Screen (m)	Cu	Zn
PW17-09	10-Dec-20	0.85-1.15	6.18	3.9
PW17-09	3-Mar-21	0.85-1.15	1.43	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-03	10-Dec-20	0.85-1.15	0.46	3.1
PW17-03	3-Mar-21	0.85-1.15	0.54	1.6

Sample ID	Date	Screen (m)	Cu	Zn
PW17-02	8-Dec-20	0.85-1.15	0.66	1.2
PW17-02	3-Mar-21	0.85-1.15	0.51	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-01	8-Dec-20	0.85-1.15	0.44	2.1
PW17-01	3-Mar-21	0.85-1.15	0.4	1.7

Sample ID	Date	Screen (m)	Cu	Zn
PW17-30	9-Dec-20	0.84-1.20	0.78	1.9
PW17-30	3-Mar-21	0.84-1.20	0.76	1.1

Sample ID	Date	Screen (m)	Cu	Zn
PW17-29	8-Dec-20	0.85-1.15	<0.2	1.6
PW17-29	3-Mar-21	0.85-1.15	0.48	1.2

Sample ID	Date	Screen (m)	Cu	Zn
PW17-28	9-Dec-20	0.84-1.20	0.22	1.3
PW17-28	4-Mar-21	0.84-1.20	0.28	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-27	9-Dec-20	0.64-1.00	0.58	3.4
PW17-27	4-Mar-21	0.64-1.00	0.75	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-26	9-Dec-20	0.45-0.75	<0.2	2.3
PW17-26	4-Mar-21	0.45-0.75	<0.20	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-08	10-Dec-20	0.84-1.20	0.4	<1.0
PW17-08	3-Mar-21	0.84-1.20	0.43	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-07	10-Dec-20	0.70-1.00	0.31	1.8
PW17-07	3-Mar-21	0.70-1.00	<0.20	1.6

Sample ID	Date	Screen (m)	Cu	Zn
PW17-06	10-Dec-20	0.84-1.20	<0.20	<1.0
PW17-06	4-Mar-21	0.84-1.20	<0.20	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-05	10-Dec-20	0.64-1.00	1.08	1
PW17-05	4-Mar-21	0.64-1.00	1.74	<1.0

Sample ID	Date	Screen (m)	Cu	Zn
PW17-04	10-Dec-20	0.45-0.75	0.2	1.2
PW17-04	4-Mar-21	0.45-0.75	<0.20	1.1

ABBREVIATIONS:

NAPL	Non-Aqueous Phase Liquid
CPR	Canadian Pacific Railway
FPTS	Foreshore Passive Treatment System
RBMT	Risk Based Management Target
<	Sample concentration less than the reported detection limit
Cu	Copper
Zn	Zinc
ug/L	microgram per litre

LEGEND:

- Property Line
- Fence Line
- Foreshore Sampling Transect
- Monitoring Well
- CPR Extraction Trench
- Impermeable Sheet
- Cobble Mat
- Rip Rap Embankment
- French Drain
- NAPL Seep Observed in 2010
- Contingency Biodegradational Piping

POREWATER SAMPLES

- Compliance Well PW17-8
- Sentry Well PW17-7
- Performance Well PW17-6
- Up Gradient Well PW17-4

- Sample concentration less than applicable RBMTs
- Sample concentration greater than applicable RBMTs

NOTE:
1. The well symbol has been colour coded to identify exceedances in the most recent sampling event.

All units in µg/L	Cu	Zn
RBMT	6.2	90

Colour coding of symbols and sample ID is based on the most recent lab result. SLR derived Risk Based Management Targets (RBMTs) that were accepted by the ENV on August 28, 2014. Details regarding the RBMTs, and associated correspondence are included in Appendix B of this report.

PINK BACKGROUND = FPTS TREATMENT CELL SAMPLE

0 10 20 metres

AECOM

WATER ANALYTICAL RESULTS FOR DISSOLVED METALS - 2020-2021

Foreshore 2020-2021 Monitoring Report,
Foreshore Below Area 2 - Parkland Refinery, Burnaby, B.C.

PARKLAND REFINING (B.C.) LTD.

DATE:	PROJECT NO.:	DRAWN BY:	REVISION NO.:	DRAWING NO.:
May 2021	60653584	NT/GS	0	FIGURE 4

FILE NAME: C:\Users\georgiana.stegariu\Downloads\2020-2021 Parkland Refinery Foreshore Monitoring Figure Request\FIG04 - Water Analytical Results for Metals (Dec 2020-Mar 2021) 2021-05-06 - 60653584.dwg

PINK BACKGROUND = FPTS TREATMENT CELL SAMPLE

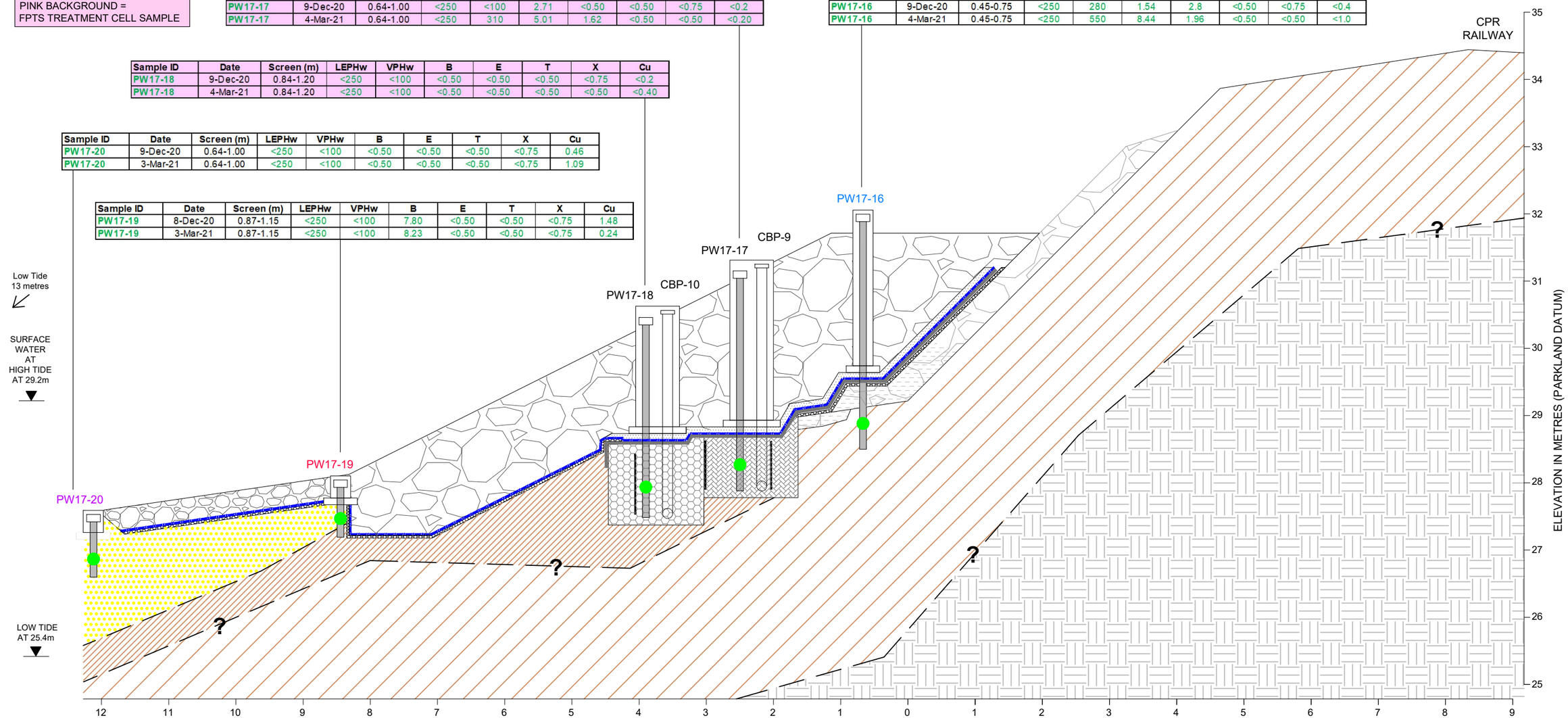
Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X	Cu
PW17-17	9-Dec-20	0.64-1.00	<250	<100	2.71	<0.50	<0.50	<0.75	<0.2
PW17-17	4-Mar-21	0.64-1.00	<250	310	5.01	1.62	<0.50	<0.50	<0.20

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X	Cu
PW17-16	9-Dec-20	0.45-0.75	<250	280	1.54	2.8	<0.50	<0.75	<0.4
PW17-16	4-Mar-21	0.45-0.75	<250	550	8.44	1.96	<0.50	<0.50	<1.0

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X	Cu
PW17-18	9-Dec-20	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.75	<0.2
PW17-18	4-Mar-21	0.84-1.20	<250	<100	<0.50	<0.50	<0.50	<0.50	<0.40

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X	Cu
PW17-20	9-Dec-20	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75	0.46
PW17-20	3-Mar-21	0.64-1.00	<250	<100	<0.50	<0.50	<0.50	<0.75	1.09

Sample ID	Date	Screen (m)	LEPHw	VPHw	B	E	T	X	Cu
PW17-19	8-Dec-20	0.87-1.15	<250	<100	7.80	<0.50	<0.50	<0.75	1.48
PW17-19	3-Mar-21	0.87-1.15	<250	<100	8.23	<0.50	<0.50	<0.75	0.24



All units in µg/L	LEPHw	VPHw	B	E	T	X	Cu
RBMT	300	1500	2100	320	770	330	6.2

Colour coding of symbols is based on the most recent lab result. SLR derived Risk Based Management Targets (RBMTs) that were accepted by the MoE on August 28, 2014. Details regarding the RBMTs, and associated correspondence are included in Appendix B of this report.

NOTE:
1. Stratigraphic thickness extrapolated based on figures provided from URS, Detailed Site Investigation (URS, 2011a).
2. Samples were not collected from CBP-9 and CBP-10.
3. Location of cross section A-A' is shown on Figure A in the text.

LEGEND

- Alluvium/colluvium
- Weathered alluvium/colluvium
- Beach Sand
- Till
- Sand, aquagate and powdered activated carbon
- Sand, aquagate and organoclay
- Sand-organoclay mixture
- Filter fabric
- Oleophilic biobarrier (OBB)
- Impermeable HDPE geomembrane
- Gravel
- Inferred stratigraphic boundary
- Baffle
- Cobbles
- Rip-Rap
- Monitoring Well
- Contingency Biodegradational Piping
- Compliance Well PW17-20
- Sentry Well PW17-19
- Performance Well PW17-18
- Up Gradient Well PW17-16
- Sample concentration less than applicable RBMTs
- Sample concentration greater than applicable RBMTs

ABBREVIATIONS:

CPR	Canadian Pacific Railway
B	Benzene
T	Toluene
E	Ethylbenzene
X	Xylenes
LEPHw	Light Extractable Petroleum Hydrocarbons in water
VPHw	Volatile Petroleum Hydrcarbons in water
Cu	Copper
ug/L	micrograms per litre
RBMT	Risk Based Management Target
FPTS	Foreshore Passive Treatment System
<	Sample concentration less than the reported detection limit indicated

GRID NORTH
N
W E
S

metres
0 2 4 6

AECOM

CROSS SECTION A-A' EASTERN FPTS WATER ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS AND DISSOLVED COPPER 2020-2021

Foreshore 2020-2021 Monitoring Report,
Foreshore Below Area 2 - Parkland Refinery, Burnaby, B.C.

PARKLAND REFINING (B.C.) LTD.

DATE:	PROJECT NO.:	DRAWN BY:	REVISION NO.:	DRAWING NO.:
May 2021	60653584	NT/GS	0	FIGURE 5

FILE NAME: C:\Users\georgiana.stegariu\Downloads\2020-2021 Parkland Refinery Foreshore Monitoring Figure Request\FIG05 - XS A-A Eastern FPTS WTR Analytical Results for PHC & CU (Dec 2020-Mar 2021) 2021-05-06 - 60653584.dwg

Tables

TABLE 1
POREWATER MONITORING DATA (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID	Date Sampled	Sample Time	Low Tide	Total Depth of Well (m from TOC)[2]	Top of Casing Elevation (TOC, mASL)[1]	Well Diameter (mm)	Screened Interval (m bgs)	Headspace Vapour Concentration (ppm unless otherwise noted)	Depth to Product (m from TOC)	Apparent Product Thickness (mm)	Depth to Water (DTW, m from TOC)	Porewater Elevation (mASL) [1]	Observations
PW17-01	22-Jun-20	11:12	13:26	1.338	29.12	50	0.85-1.15	0	---	ND	0.785	28.34	---
PW17-01	28-Sep-20	9:40	10:17	1.329	29.12	50	0.85-1.15	0	---	ND	0.811	28.31	---
PW17-01	08-Dec-20	18:20	19:12	1.326	29.12	50	0.85-1.15	45	---	ND	0.763	28.36	---
PW17-01	03-Mar-21	15:53	15:08	1.339	29.12	50	0.85-1.15	0	---	ND	0.540	28.58	Clear
PW17-02	08-Dec-20	18:30	19:12	1.209	27.72	50	0.85-1.15	20	---	ND	0.214	27.51	---
PW17-02	03-Mar-21	15:15	15:08	1.217	27.72	50	0.85-1.15	0	---	ND	0.584	27.14	Clear
PW17-03	10-Dec-20	20:33	20:42	1.334	27.24	50	0.85-1.15	5	---	ND	0.425	26.82	---
PW17-03	03-Mar-21	14:57	15:08	1.348	27.24	50	0.85-1.15	0	---	ND	0.398	26.84	Clear
PW17-04	22-Jun-20	11:08	13:26	3.382	31.19	50	0.45-0.75	0	---	ND	2.956	28.23	---
PW17-04	28-Sep-20	9:35	10:17	3.114	31.19	50	0.45-0.75	0	---	ND	1.917	29.27	---
PW17-04	10-Dec-20	18:52	20:42	3.354	31.19	50	0.45-0.75	0	---	ND	2.782	28.41	---
PW17-04	04-Mar-21	15:49	17:04	3.387	31.19	50	0.45-0.75	0	---	ND	2.925	28.27	---
PW17-05	22-Jun-20	11:13	13:26	3.099	30.22	50	0.64-1.00	0	---	ND	2.182	28.04	---
PW17-05	28-Sep-20	9:30	10:17	3.088	30.22	50	0.64-1.00	0	---	ND	2.241	27.98	---
PW17-05	10-Dec-20	17:30	20:42	3.088	30.22	50	0.64-1.00	0	---	ND	2.031	28.19	---
PW17-05	04-Mar-21	15:40	17:04	3.092	30.22	50	0.64-1.00	0	---	ND	2.125	28.10	Slightly Cloudy, Brown
PW17-06	10-Dec-20	19:12	20:42	3.101	29.79	50	0.84-1.20	0	---	ND	1.770	28.02	---
PW17-06	04-Mar-21	15:32	17:04	3.119	29.79	50	0.84-1.20	0	---	ND	1.834	27.96	Clear
PW17-07	10-Dec-20	20:12	20:42	1.105	27.29	50	0.70-1.00	15	---	ND	0.507	26.78	---
PW17-07	03-Mar-21	15:35	16:13	1.499	27.29	50	0.70-1.00	0	---	ND	0.332	26.96	Clear
PW17-08	10-Dec-20	20:43	20:42	1.343	26.6	50	0.84-1.20	20	---	ND	0.238	26.362	---
PW17-08	03-Mar-21	15:24	16:13	1.414	26.6	50	0.84-1.20	0	---	ND	0.558	26.042	Clear
PW17-09	22-Jun-20	11:03	13:26	1.368	28.55	50	0.85-1.15	0	---	ND	0.551	28.00	---
PW17-09	28-Sep-20	9:22	10:17	1.369	28.55	50	0.85-1.15	0	---	ND	0.514	28.04	---
PW17-09	10-Dec-20	18:28	20:42	1.364	28.55	50	0.85-1.15	45	---	ND	0.709	27.84	---
PW17-09	03-Mar-21	15:57	16:13	1.370	28.55	50	0.85-1.15	20	---	ND	0.564	27.99	Clear; Biofoul
PW17-10	10-Dec-20	19:45	20:42	1.371	27.25	50	0.85-1.15	20	---	ND	0.378	26.87	---
PW17-10	03-Mar-21	15:39	16:13	1.379	27.25	50	0.85-1.15	0	---	ND	0.823	26.43	Clear
PW17-11	10-Dec-20	20:28	20:42	1.44	26.72	50	0.74-1.10	5	---	ND	0.457	26.26	---
PW17-11	03-Mar-21	15:07	16:13	1.451	26.72	50	0.74-1.10	0	---	ND	0.404	26.32	Clear
PW17-12	10-Dec-20	19:53	20:42	1.448	27.03	50	0.85-1.15	5	---	ND	0.357	26.67	---
PW17-12	03-Mar-21	14:51	16:13	1.458	27.03	50	0.85-1.15	0	---	ND	0.542	26.49	Clear
PW17-13	22-Jun-20	10:58	13:26	1.516	28.9	50	0.85-1.15	0	---	ND	0.512	28.39	---
PW17-13	28-Sep-20	9:15	10:17	1.325	28.9	50	0.85-1.15	0	---	ND	0.533	28.37	---
PW17-13	08-Dec-20	19:23	19:12	1.309	28.9	50	0.85-1.15	0	---	ND	0.473	28.43	---
PW17-13	03-Mar-21	16:13	16:13	1.325	28.9	50	0.85-1.15	0	---	ND	0.355	28.55	Clear
PW17-14	08-Dec-20	19:42	19:12	1.386	27.83	50	0.85-1.15	0	---	ND	0.104	27.73	---
PW17-14	03-Mar-21	15:51	16:13	1.394	27.83	50	0.85-1.15	0	---	ND	0.145	27.69	Clear
PW17-15	10-Dec-20	20:11	20:42	1.381	27.03	50	0.84-1.20	5	---	ND	0.452	26.58	---
PW17-15	03-Mar-21	14:32	16:13	1.493	27.03	50	0.84-1.20	0	---	ND	0.484	26.55	Clear

TABLE 1
POREWATER MONITORING DATA (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID	Date Sampled	Sample Time	Low Tide	Total Depth of Well (m from TOC)[2]	Top of Casing Elevation (TOC, mASL)[1]	Well Diameter (mm)	Screened Interval (m bgs)	Headspace Vapour Concentration (ppm unless otherwise noted)	Depth to Product (m from TOC)	Apparent Product Thickness (mm)	Depth to Water (DTW, m from TOC)	Porewater Elevation (mASL) [1]	Observations
PW17-16	22-Jun-20	10:38	13:26	3.261	31.44	50	0.45-0.75	0	---	ND	2.699	28.74	---
PW17-16	28-Sep-20	8:44	10:17	3.265	31.44	50	0.45-0.75	0	---	ND	2.820	28.62	---
PW17-16	09-Dec-20	20:14	19:58	3.262	31.44	50	0.45-0.75	0	---	ND	2.603	28.84	DUP-1
PW17-16	04-Mar-21	14:52	17:04	3.267	31.44	50	0.45-0.75	0	---	ND	2.669	28.77	Clear; DUP-3
PW17-17	22-Jun-20	10:44	13:26	3.187	30.76	50	0.64-1.00	0	---	ND	2.075	28.69	Very minor orange biofoul on probe
PW17-17	28-Sep-20	8:40	10:17	3.197	30.76	50	0.64-1.00	0	---	ND	2.196	28.56	---
PW17-17	09-Dec-20	20:21	19:58	3.190	30.76	50	0.64-1.00	0	---	ND	1.973	28.79	---
PW17-17	04-Mar-21	15:14	17:04	3.200	30.76	50	0.64-1.00	0	---	ND	2.003	28.76	Clear, Biofoul
PW17-18	09-Dec-20	20:40	19:58	3.389	30.6	50	0.84-1.20	40	---	ND	1.830	28.77	---
PW17-18	04-Mar-21	15:33	17:04	3.399	30.6	50	0.84-1.20	15	---	ND	1.864	28.74	Clear; Hydrocarbon-like Odour
PW17-19	08-Dec-20	19:19	19:12	1.320	28.210	50	0.87-1.15	40	---	ND	0.279	27.93	---
PW17-19	03-Mar-21	16:16	16:13	1.331	28.210	50	0.87-1.15	35	---	ND	0.422	27.79	Clear; Biofoul
PW17-20	09-Dec-20	21:35	19:58	1.471	27.58	50	0.64-1.00	20	---	ND	0.211	27.37	---
PW17-20	03-Mar-21	14:22	16:13	1.487	27.58	50	0.64-1.00	35	---	ND	0.204	27.38	Clear; Biofoul
PW17-21	22-Jun-20	11:18	13:26	3.36	31.38	20	0.45-0.75	0	---	ND	2.572	28.81	---
PW17-21	28-Sep-20	8:54	10:17	3.361	31.38	20	0.45-0.75	0	---	ND	2.598	28.78	---
PW17-21	09-Dec-20	19:10	19:58	3.354	31.38	20	0.45-0.75	0	---	ND	2.312	29.07	---
PW17-21	03-Mar-21	16:56	16:13	3.379	31.38	20	0.45-0.75	0	---	ND	2.371	29.01	Clear
PW17-22	22-Jun-20	10:54	13:26	3.515	31.14	50	0.64-1.00	0	---	ND	2.491	28.65	---
PW17-22	28-Sep-20	8:49	10:17	3.513	31.14	50	0.64-1.00	0	---	ND	2.608	28.53	---
PW17-22	09-Dec-20	19:31	19:58	3.526	31.14	50	0.64-1.00	0	---	ND	2.286	28.85	DUP-3
PW17-22	04-Mar-21	15:00	17:04	3.519	31.14	50	0.64-1.00	0	---	ND	2.361	28.78	Clear
PW17-23	09-Dec-20	20:06	19:58	3.202	30.58	50	0.84-1.20	0	---	ND	1.781	28.80	---
PW17-23	04-Mar-21	15:15	17:04	3.028	30.58	50	0.84-1.20	0	---	ND	1.771	28.81	Clear
PW17-24	08-Dec-20	19:07	19:12	1.337	28.12	50	0.85-1.15	5	---	ND	0.673	27.45	---
PW17-24	03-Mar-21	16:12	16:13	1.345	28.12	50	0.85-1.15	0	---	ND	0.478	27.64	Clear
PW17-25	09-Dec-20	21:18	19:58	1.260	27.430	50	0.85-1.15	0	---	ND	0.265	27.17	---
PW17-25	03-Mar-21	14:15	16:13	1.274	27.430	50	0.85-1.15	0	---	ND	0.196	27.23	Clear
PW17-26	22-Jun-20	10:33	13:26	3.789	31.81	50	0.45-0.75	0	---	ND	3.094	28.72	---
PW17-26	28-Sep-20	9:00	10:17	3.793	31.81	50	0.45-0.75	0	---	ND	3.185	28.63	---
PW17-26	09-Dec-20	18:50	19:58	3.786	31.81	50	0.45-0.75	140	---	ND	2.933	28.88	DUP-2
PW17-26	04-Mar-21	15:38	17:04	3.805	31.81	50	0.45-0.75	0	---	ND	2.978	28.83	Clear; Biofoul; DUP-1
PW17-27	22-Jun-20	10:50	13:26	3.809	31.4	50	0.64-1.00	0	---	ND	2.766	28.63	---
PW17-27	28-Sep-20	9:48	10:17	3.806	31.4	50	0.64-1.00	0	---	ND	2.861	28.54	---
PW17-27	09-Dec-20	19:25	19:58	3.807	31.4	50	0.64-1.00	0	---	ND	2.532	28.87	---
PW17-27	04-Mar-21	15:10	17:04	3.812	31.4	50	0.64-1.00	0	---	ND	2.589	28.81	Clear; DUP-2
PW17-28	09-Dec-20	19:47	19:58	3.224	30.53	50	0.84-1.20	0	---	ND	1.671	28.86	---
PW17-28	04-Mar-21	15:02	17:04	3.233	30.53	50	0.84-1.20	0	---	ND	1.697	28.83	Clear
PW17-29	08-Dec-20	20:13	19:12	1.292	28.24	50	0.85-1.15	0	---	ND	0.572	27.67	---
PW17-29	03-Mar-21	16:30	16:13	1.397	28.24	50	0.85-1.15	10	---	ND	0.456	27.78	Clear
PW17-30	09-Dec-20	19:10	19:58	1.354	27.39	50	0.84-1.20	0	---	ND	0.225	27.17	---
PW17-30	03-Mar-21	14:08	16:13	1.371	27.39	50	0.84-1.20	0	---	ND	0.134	27.26	Clear

TABLE 1
POREWATER MONITORING DATA (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID	Date Sampled	Sample Time	Low Tide	Total Depth of Well (m from TOC)[2]	Top of Casing Elevation (TOC, mASL)[1]	Well Diameter (mm)	Screened Interval (m bgs)	Headspace Vapour Concentration (ppm unless otherwise noted)	Depth to Product (m from TOC)	Apparent Product Thickness (mm)	Depth to Water (DTW, m from TOC)	Porewater Elevation (mASL) [1]	Observations
PW17-31	22-Jun-20	10:27	13:26	1.266	29.31	50	0.85-1.15	0	---	ND	0.464	28.85	---
PW17-31	28-Sep-20	9:10	10:17	1.262	29.31	50	0.85-1.15	10	---	ND	0.529	28.78	---
PW17-31	08-Dec-20	20:36	19:12	1.258	29.31	50	0.85-1.15	10	---	ND	0.527	28.78	---
PW17-31	04-Mar-21	14:40	17:04	1.266	29.31	50	0.85-1.15	10	---	ND	0.738	28.57	Clear
PW17-32	08-Dec-20	20:39	19:12	1.298	27.58	50	0.85-1.15	40	---	ND	0.330	27.25	---
PW17-32	03-Mar-21	16:48	16:13	1.339	27.58	50	0.85-1.15	0	---	ND	0.161	27.42	Clear; Biofoul
PW17-33	09-Dec-20	21:02	19:58	1.262	27.53	50	0.85-1.15	50	---	ND	0.368	27.16	---
PW17-33	03-Mar-21	13:53	16:13	1.269	27.53	50	0.85-1.15	10	---	ND	0.344	27.19	Clear

Notes:
1 - Elevations are in Parkland Datum = Geodetic Datum + 91.52 feet.

Abbreviations:
m - metres
m bgs - metres below ground surface
mASL - metres above sea level
mg/L - milligrams per liter
mm - millimetres
ppm - parts per million
--- - no observations

Acronyms:
DTW - depth to water
FPTS - Foreshore Passive Treatment System
NA - not applicable
ND - not detected
TOC - top of casing

TABLE 2
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.75, 0.5 [3]
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<250	**280.**	**1.54**	**2.8**	<0.50	<0.75
DUP-1 (PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<250	**330.**	**1.69**	**4.28**	<0.50	<0.75
QA/QC RPD											9-Dec-20		---	---	---	**42%**	---	---
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<250	**550.**	**8.44**	**1.96**	<0.50	<0.50
DUP-3 (PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	**280.**	**550.**	**8.47**	**1.97**	<0.50	<0.50
QA/QC RPD											4-Mar-21		---	**0%**	**0%**	---	---	---

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PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.75, 0.5 [3]
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<250	<100	**2.71**	<0.50	<0.50	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<250	**310.**	**5.01**	**1.62**	<0.50	<0.50
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<250	<100	**7.80**	<0.50	<0.50	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	**8.23**	<0.50	<0.50	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<250	<100	**1.41**	<0.50	<0.50	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-3 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											9-Dec-20		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-2 (PW17-26)	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											9-Dec-20		---	---	---	---	---	---
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
DUP-1 (PW17-26)	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
QA/QC RPD											4-Mar-21		---	---	---	---	---	---
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
DUP-2 (PW17-27)	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
QA/QC RPD											4-Mar-21		---	---	---	---	---	---
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<250	<100	**5.33**	<0.50	<0.50	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<250	<100	**19.0**	<0.50	<0.50	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75

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Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
R-BLANK-1	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	8-Dec-20	VA20C2850	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-2	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	10-Dec-20	VA20C3128	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-1	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	3-Mar-21	VA21A3930	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-2	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	4-Mar-21	VA21A4107	<250	<100	<0.50	<0.50	<0.50	<0.50
TRAVEL BLANK-1	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	8-Dec-20	VA20C2850	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-2	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	9-Dec-20	VA20C3039	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-3	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	9-Dec-20	VA20C3039	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-5	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	10-Dec-20	VA20C3128	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-1	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	3-Mar-21	VA21A3930	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-2	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	3-Mar-21	VA21A3930	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-3	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	3-Mar-21	VA21A3930	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-4	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	4-Mar-21	VA21A4107	---	<100	<0.50	<0.50	<0.50	<0.50
TRAVEL BLANK-5	NA	NA	ALS	GC-MS/FID	NA	NA	NA	NA	NA	NA	4-Mar-21	VA21A4107	---	<100	<0.50	<0.50	<0.50	<0.50

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.

1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.
3 - Laboratory detection limit for xylenes was reduced from 0.75 ug/L to 0.5 ug/L for select samples analyzed in 2021.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
CS - well located cross slope
DL - detection limit
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
IBA - In between area
LEPHw - light extractable petroleum hydrocarbons in water
NA - not applicable
GC-MS/FID - Gas Chromotography - Mass Spectrometry / Flame Ionization Detection
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
U - Up gradient well (Post-construction)
VPHw - volatile petroleum hydrocarbons in water
W FPTS - Western Foreshore Passive Treatment System
QA/QC - Quality Assurance / Quality Control
RPD - Relative Percent Difference

TABLE 3
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	**0.0256**	**0.054**
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050

TABLE 3
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	<0.0050	<0.050
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<0.0050	<0.400
DUP-1 (PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<0.0050	<0.450
QA/QC RPD											9-Dec-20		---	---
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<0.0050	<0.700
DUP-3 (PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<0.0050	<0.670
QA/QC RPD											4-Mar-21		---	---
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<0.0050	<0.200
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<0.0050	<0.210
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<0.0050	<0.100
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.110
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<0.0050	<0.050
DUP-3 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<0.0050	<0.050
QA/QC RPD											9-Dec-20		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050

TABLE 3
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<0.0050	<0.050
DUP-2(PW17-26)	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	<0.0050	<0.050
QA/QC RPD											9-Dec-20		---	---
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<0.0050	<0.050
DUP-1(PW17-26)	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	<0.0050	<0.050
QA/QC RPD											4-Mar-21		---	---
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<0.0050	<0.050
DUP-2(PW17-27)	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	<0.0050	<0.050
QA/QC RPD											4-Mar-21		---	---
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Mar-21	VA21A4107	<0.0050	<0.050
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	<0.0050	<0.050
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	<0.0050	<0.050
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	<0.0050	<0.050

TABLE 3
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	08-Dec-20	VA20C2850	<0.0050	<0.050
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	10-Dec-20	VA20C3128	<0.0050	<0.050
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	03-Mar-21	VA21A3930	<0.0050	<0.050
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	04-Mar-21	VA21A4107	<0.0050	<0.050

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.

1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.
3 - The Ministry of Environment and Climate Change Strategy (ENV) requires the co-reporting of PAHs when LEPH and HEPH calculations are required, consequently, LEPH and HEPH must be co-reported with the corresponding PAH results. Although these PAHs are not considered site specific contaminants of concern (COCs), they were analyzed to calculate LEPH and/or HEPH and were either not detected or detected below Updated Screening Levels (USLs). For the purpose of this monitoring report, these PAHs have not been tabulated; however, as it is an ENV requirement, the data has been included in the ALS laboratory reports provided in Appendix C.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres
Acronyms
AG - aquagate
C - Compliance well (Post-construction)
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
IBA - In between area
NA - not applicable
NS - no standard established for indicated parameter.
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
U - Up gradient well (Post-construction)
W FPTS - Western Foreshore Passive Treatment System

TABLE 4
CONCENTRATIONS OF DISSOLVED METALS IN WATER SAMPLES FORESHORE POST FPTS CONSTRUCTION (2020 - 2021)
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	D	**0.44**	**2.1**
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	D	**0.4**	**1.7**
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	D	**0.66**	**1.2**
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.51**	<1.0
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	D	**0.46**	**3.1**
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.54**	**1.6**
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	10-Dec-20	VA20C3128	D	**0.2**	**1.2**
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	D	<0.20	**1.1**
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Dec-20	VA20C3128	D	**1.08**	**1.**
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	D	**1.74**	<1.0
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Dec-20	VA20C3128	D	<0.20	<1.0
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	D	<0.20	<1.0
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Dec-20	VA20C3128	D	**0.31**	**1.8**
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Mar-21	VA21A3930	D	<0.20	**1.6**
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	D	**0.4**	<1.0
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	D	**0.43**	<1.0
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-20	VA20C3128	D	**6.18**	**3.9**
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	D	**1.43**	<1.0
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	D	**0.61**	**2.3**
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.62**	**1.9**
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-20	VA20C3128	D	<0.20	<1.0
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Mar-21	VA21A3930	D	<0.20	<1.0
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	VA20C3128	D	**0.37**	**1.4**
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.43**	<1.0
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	D	**2.05**	<1.0
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	D	**1.25**	**1.4**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	D	**0.56**	**3.4**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.51**	**1.8**
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	VA20C3128	D	**0.27**	**1.4**
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	D	**0.4**	<1.0

TABLE 4
CONCENTRATIONS OF DISSOLVED METALS IN WATER SAMPLES FORESHORE POST FPTS CONSTRUCTION (2020 - 2021)
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	D	<0.4	<2
DUP1 (PW17-16)	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	D	**0.52**	<2
QA/QC RPD										9-Dec-20			---	---
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	D	<1.0	<5.0
DUP-3 (PW17-16)	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	D	<1.0	<5.0
QA/QC RPD										4-Mar-21			---	---
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	D	<0.2	**1.3**
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	D	<0.20	<1.0
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	D	<0.2	**6.6**
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	D	<0.40	<2.0
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	D	**1.48**	**2.2**
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	D	**0.24**	**1.6**
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	9-Dec-20	VA20C3039	D	**0.46**	**7.1**
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	3-Mar-21	VA21A3930	D	**1.09**	**2.6**
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	D	**0.52**	<2
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	3-Mar-21	VA21A3930	D	**0.43**	<2.0
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	D	**1.53**	**3.60**
DUP3 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	D	**1.5**	**3.4**
QA/QC RPD										9-Dec-20			2.0%	---
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	D	**1.12**	<1.0
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	D	**0.34**	**11.9**
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	D	**0.38**	<1.0
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	D	**0.26**	**1.7**
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.21**	<1.0
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	D	**0.7**	**1.5**
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.68**	**1.5**
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	D	<0.2	**2.3**
DUP 2(PW17-26)	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	9-Dec-20	VA20C3039	D	<0.2	**2.6**
QA/QC RPD										9-Dec-20			---	---
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	D	<0.20	<1.0
DUP-1(PW17-26)	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	4-Mar-21	VA21A4107	D	<0.20	<1.0
QA/QC RPD										4-Mar-21			---	---
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	9-Dec-20	VA20C3039	D	**0.58**	**3.4**
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	D	**0.75**	<1.0
DUP-2(PW17-27)	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	4-Mar-21	VA21A4107	D	**0.75**	<1.0
QA/QC RPD										4-Mar-21			---	---
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	9-Dec-20	VA20C3039	D	**0.22**	**1.3**
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	4-Mar-21	VA21A4107	D	**0.28**	<1.0

TABLE 4
CONCENTRATIONS OF DISSOLVED METALS IN WATER SAMPLES FORESHORE POST FPTS CONSTRUCTION (2020 - 2021)
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	8-Dec-20	VA20C2850	D	<0.2	**1.6**
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	3-Mar-21	VA21A3930	D	**0.48**	**1.2**
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	9-Dec-20	VA20C3039	D	**0.78**	**1.9**
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Mar-21	VA21A3930	D	**0.76**	**1.1**
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	D	<1.	<5.
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Mar-21	VA21A4107	D	**0.5**	**1.1**
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	8-Dec-20	VA20C2850	D	**1.59**	**4.9**
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.71**	**5.1**
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	9-Dec-20	VA20C3039	D	**0.22**	**2.1**
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Mar-21	VA21A3930	D	**0.32**	**1.9**
R-BLANK-1	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	8-Dec-20	VA20C2850	D	<0.20	<1.0
R-BLANK-2	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	10-Dec-20	VA20C3128	D	<0.20	**1.8**
R-BLANK-1	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	3-Mar-21	VA21A3930	D	<0.20	<1.0
R-BLANK-2	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	4-Mar-21	VA21A4107	D	<0.20	<1.0

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.
1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.

BOLD	Sam Sample concentration is detected
SHADE	Sam Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
CRC ICPMS - Collision/Reaction Cells Inductively Coupled Plasma Mass Spectrometry
D - dissolved metals
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
HR ICPMS - High Resolution Inductively Coupled Plasma Mass Spectrometry
NS - no standard established for indicated parameter.
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
U - Up gradient well (Post-construction)
W FPTS - Western Foreshore Passive Treatment System

TABLE 5
FIELD AND POREWATER QUALITY PARAMETERS (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

										pH	Temperature	Electrical Conductivity (µS/cm)	Salinity (ppt)	ORP	DO (mg/L)	Turbidity (NTU)	Total Dissolved Solids (g/L)
Applicable Standard										NS	NS	NS	NS	NS	NS	NS	NS
Sample ID	**Matrix**	**Sample Location**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**								
PW17-01	Porewater	PW17-01	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	08-Dec-20	**6.62**	**9.49**	**14613**	**12.40**	**-13.5**	**9.53**	**1.39**	**13.46**
PW17-01	Porewater	PW17-01	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	03-Mar-21	**7.05**	**7.75**	**11054**	**9.85**	**131.8**	**10.38**	**0.21**	**10.84**
PW17-02	Porewater	PW17-02	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	08-Dec-20	**7.00**	**9.33**	**9941**	**12.21**	**-29.9**	**6.95**	**1.31**	**13.41**
PW17-02	Porewater	PW17-02	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**6.98**	**8.32**	**17608**	**15.83**	**139.2**	**8.55**	**0.97**	**16.87**
PW17-03	Porewater	PW17-03	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	**7.50**	**9.30**	**20195**	**17.71**	**121.5**	**7.69**	**11.4**	**18.77**
PW17-03	Porewater	PW17-03	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.60**	**8.52**	**22654**	**20.58**	**140.6**	**9.48**	**3.79**	**21.49**
PW17-04	Porewater EAZ	PW17-04	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	10-Dec-20	**6.96**	**9.00**	**8576**	**7.49**	**113.9**	**1.23**	**22.3**	**8.76**
PW17-04	Porewater EAZ	PW17-04	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	04-Mar-21	**7.06**	**7.72**	**12300**	**10.25**	**3.5**	**3.31**	**19.4**	**11.99**
PW17-05	Porewater EAZ	PW17-05	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Dec-20	**8.04**	**9.20**	**5783**	**4.60**	**71.1**	**5.05**	**4.75**	**5.27**
PW17-05	Porewater EAZ	PW17-05	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	04-Mar-21	**7.70**	**7.93**	**9621**	**8.82**	**76.4**	**3.75**	**16.40**	**9.495**
PW17-06	Porewater	PW17-06	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Dec-20	**7.86**	**9.20**	**5901**	**4.71**	**73.7**	**1.93**	**0.90**	**5.496**
PW17-06	Porewater	PW17-06	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	04-Mar-21	**7.44**	**8.24**	**10642**	**9.02**	**-106.2**	**2.15**	**1.30**	**9.965**
PW17-07	Porewater EAZ	PW17-07	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Dec-20	**7.13**	**9.30**	**16825**	**14.51**	**118.4**	**9.46**	**30.94**	**15.61**
PW17-07	Porewater EAZ	PW17-07	S	W FPTS	0.70-1.00	0.7	1	Beach sand	03-Mar-21	**7.28**	**8.91**	**17104**	**15.03**	**177.5**	**2.19**	**0.48**	**16.14**
PW17-08	Porewater	PW17-08	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	**7.53**	**8.90**	**11413**	**9.65**	**120.6**	**7.69**	**27.2**	**10.89**
PW17-08	Porewater	PW17-08	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	03-Mar-21	**7.64**	**8.37**	**21456**	**19.43**	**97.4**	**4.96**	**1.71**	**20.42**
PW17-09	Porewater	PW17-09	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-20	**6.18**	**9.30**	**18792**	**16.38**	**185.3**	**0.69**	**36.5**	**17.43**
PW17-09	Porewater	PW17-09	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	03-Mar-21	**6.55**	**8.28**	**13374**	**11.67**	**19.1**	**0.67**	**22.3**	**12.78**
PW17-10	Porewater	PW17-10	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	**7.10**	**9.20**	**20780**	**18.35**	**121.9**	**3.02**	**5.06**	**14.34**
PW17-10	Porewater	PW17-10	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.32**	**8.53**	**23479**	**21.35**	**102.5**	**3.77**	**2.4**	**22.25**
PW17-11	Porewater	PW17-11	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-20	**7.38**	**9.50**	**17570**	**15.12**	**163.5**	**4.29**	**38**	**16.18**
PW17-11	Porewater	PW17-11	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	03-Mar-21	**7.48**	**8.58**	**18608**	**16.53**	**90.4**	**3.51**	**5.46**	**17.61**
PW17-12	Porewater	PW17-12	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-20	**7.09**	**9.60**	**22654**	**19.88**	**188.4**	**8.84**	**96.8**	**20.80**
PW17-12	Porewater	PW17-12	C	IBA	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.51**	**8.58**	**23684**	**21.53**	**86.5**	**8.20**	**64.2**	**22.41**
PW17-13	Porewater	PW17-13	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	08-Dec-20	**6.99**	**8.78**	**7801**	**6.43**	**-17.3**	**9.25**	**0.9**	**7.345**
PW17-13	Porewater	PW17-13	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	03-Mar-21	**6.74**	**7.50**	**9990**	**8.75**	**68.4**	**7.80**	**1.18**	**9.780**
PW17-14	Porewater	PW17-14	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	08-Dec-20	**6.52**	**9.24**	**12722**	**10.82**	**-44.2**	**3.41**	**8.68**	**12.01**
PW17-14	Porewater	PW17-14	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**6.56**	**8.08**	**12613**	**11.02**	**47.8**	**3.10**	**5.9**	**12.12**
PW17-15	Porewater	PW17-15	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-20	**7.46**	**9.60**	**20400**	**17.77**	**167.9**	**7.22**	**9.12**	**18.76**
PW17-15	Porewater	PW17-15	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	03-Mar-21	**7.53**	**8.65**	**20835**	**18.67**	**145.9**	**10.18**	**10.9**	**19.70**

TABLE 5
FIELD AND POREWATER QUALITY PARAMETERS (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

										pH	Temperature	Electrical Conductivity (µS/cm)	Salinity (ppt)	ORP	DO (mg/L)	Turbidity (NTU)	Total Dissolved Solids (g/L)
Applicable Standard										NS	NS	NS	NS	NS	NS	NS	NS
Sample ID	**Matrix**	**Sample Location**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**								
PW17-16	Porewater EAZ	PW17-16	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	09-Dec-20	**6.89**	**9.33**	**2264**	**1.70**	**-164.3**	**2.60**	**39**	**2.096**
PW17-16	Porewater EAZ	PW17-16	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	04-Mar-21	**6.70**	**7.58**	**2149**	**1.73**	**-42.4**	**0.94**	**15.3**	**2.121**
PW17-17	Porewater EAZ	PW17-17	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	09-Dec-20	**6.72**	**9.53**	**3175**	**2.39**	**-174.1**	**0.73**	**132**	**2.682**
PW17-17	Porewater EAZ	PW17-17	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	04-Mar-21	**6.77**	**7.96**	**1141**	**0.84**	**-62.5**	**0.30**	**224**	**1.086**
PW17-18	Porewater	PW17-18	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	09-Dec-20	**6.60**	**9.77**	**4003**	**3.10**	**-107.4**	**2.11**	**4**	**3.690**
PW17-18	Porewater	PW17-18	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	04-Mar-21	**6.81**	**8.17**	**2851**	**2.22**	**-48.1**	**0.94**	**20.8**	**2.720**
PW17-19	Porewater	PW17-19	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	08-Dec-20	**9.08**	**9.15**	**7587**	**6.18**	**-130.1**	**0.51**	**11.9**	**7.065**
PW17-19	Porewater	PW17-19	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	03-Mar-21	**6.47**	**8.47**	**6989**	**5.77**	**11.9**	**0.67**	**8.91**	**6.638**
PW17-20	Porewater EAZ	PW17-20	C	E FPTS	0.64-1.00	0.64	1	Beach sand	09-Dec-20	**6.45**	**9.01**	**11533**	**9.73**	**-72.6**	**6.13**	**0.12**	**10.770**
PW17-20	Porewater EAZ	PW17-20	C	E FPTS	0.64-1.00	0.64	1	Beach sand	03-Mar-21	**6.49**	**8.88**	**11103**	**9.38**	**111.2**	**2.94**	**13.2**	**10.430**
PW17-21	Porewater EAZ	PW17-21	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	09-Dec-20	**6.87**	**10.04**	**904**	**0.67**	**-132.9**	**4.96**	**16.40**	**0.865**
PW17-21	Porewater EAZ	PW17-21	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	03-Mar-21	**6.91**	**8.25**	**870**	**0.64**	**61.0**	**4.81**	**6.63**	**0.831**
PW17-22	Porewater EAZ	PW17-22	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	09-Dec-20	**7.35**	**9.56**	**9437**	**7.69**	**-153.8**	**3.93**	**4.71**	**8.680**
PW17-22	Porewater EAZ	PW17-22	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	04-Mar-21	**7.02**	**7.91**	**2078**	**1.55**	**42.7**	**1.56**	**1.28**	**1.963**
PW17-23	Porewater	PW17-23	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	09-Dec-20	**7.63**	**9.45**	**6027**	**4.74**	**-169.9**	**2.12**	**1.41**	**5.339**
PW17-23	Porewater	PW17-23	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	04-Mar-21	**7.18**	**7.94**	**2485**	**1.87**	**60.3**	**0.93**	**4.42**	**2.496**
PW17-24	Porewater	PW17-24	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	09-Dec-20	**8.88**	**9.27**	**13707**	**11.65**	-97.0	**1.91**	**3.53**	**12.740**
PW17-24	Porewater	PW17-24	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.25**	**8.23**	**11998**	**10.28**	**132.1**	**3.49**	**4.77**	**11.460**
PW17-25	Porewater	PW17-25	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	08-Dec-20	**7.10**	**9.29**	**18140**	**15.76**	**-106.4**	**5.26**	**49.1**	**16.78**
PW17-25	Porewater	PW17-25	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.61**	**8.76**	**21080**	**19.10**	**146.8**	**10.44**	**2.29**	**20.01**
PW17-26	Porewater EAZ	PW17-26	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	09-Dec-20	**7.43**	**9.28**	**914**	**0.66**	**-143.3**	**1.68**	**27.1**	**0.847**
PW17-26	Porewater EAZ	PW17-26	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	04-Mar-21	**6.95**	**7.69**	**349**	**0.25**	**55.7**	**2.351**	**17.5**	**0.337**
PW17-27	Porewater EAZ	PW17-27	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	09-Dec-20	**7.86**	**8.95**	**2023**	**1.52**	**-128.5**	**5.73**	**21.6**	**1.895**
PW17-27	Porewater EAZ	PW17-27	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	04-Mar-21	**7.60**	**7.70**	**1090**	**0.81**	**22.8**	**0.62**	**6.91**	**1.051**
PW17-28	Porewater	PW17-28	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	09-Dec-20	**7.82**	**9.35**	**5733**	**4.56**	**-185.1**	**2.02**	**3.63**	**5.307**
PW17-28	Porewater	PW17-28	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	04-Mar-21	**8.08**	**7.94**	**1628**	**1.20**	**35.8**	**3.78**	**2.31**	**1.556**
PW17-29	Porewater	PW17-29	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	08-Dec-20	**7.22**	**9.27**	**13321**	**11.28**	**-105.4**	**1.97**	**1.25**	**12.320**
PW17-29	Porewater	PW17-29	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	03-Mar-21	**6.97**	**8.03**	**11317**	**9.82**	**68.3**	**5.98**	**2.48**	**10.890**
PW17-30	Porewater	PW17-30	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	09-Dec-20	**7.35**	**9.38**	**15887**	**13.66**	**-109.0**	**9.16**	**15.70**	**14.810**
PW17-30	Porewater	PW17-30	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	03-Mar-21	**7.67**	**8.38**	**16997**	**15.33**	**-94.9**	**10.38**	**7.41**	**16.360**
PW17-31	Porewater	PW17-31	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	08-Dec-20	**11.62**	**8.33**	**3879**	**3.09**	**-87.4**	**7.32**	**9.00**	**3.693**
PW17-31	Porewater	PW17-31	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	04-Mar-21	**7.45**	**7.37**	**5574**	**4.24**	**53.5**	**13.11**	**9.09**	**5.429**
PW17-32	Porewater	PW17-32	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	08-Dec-20	**6.15**	**8.95**	**6940**	**5.65**	**-55.1**	**2.26**	**42**	**6.497**
PW17-32	Porewater	PW17-32	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**6.32**	**7.73**	**6839**	**5.76**	**74.0**	**6.93**	**22.4**	**6.639**

TABLE 5
FIELD AND POREWATER QUALITY PARAMETERS (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

										pH	Temperature	Electrical Conductivity (µS/cm)	Salinity (ppt)	ORP	DO (mg/L)	Turbidity (NTU)	Total Dissolved Solids (g/L)
Applicable Standard										NS	NS	NS	NS	NS	NS	NS	NS
Sample ID	**Matrix**	**Sample Location**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**								
PW17-33	Porewater	PW17-32	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	09-Dec-20	**7.47**	**9.32**	**9043**	**7.43**	**-125.4**	**1.04**	**18.00**	**8.386**
PW17-33	Porewater	PW17-32	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	03-Mar-21	**7.35**	**9.08**	**7400**	**6.04**	**179.5**	**10.67**	**3.24**	**6.924**

Notes

BOLD	Sample concentration is detected

Abbreviations
µS/cm - microsiemens per centimetre
g/L - grams per litre
m - metres
mg/L - milligrams per litre
mm - millimetres
NTU - nephelometric turbidity units
ppt - parts per thousand

Acronyms
AG - Aquagate
C - Compliance well
DO - dissolved oxygen
DTW - depth to water
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
IBA - In between area
NA - not applicable
NM - not measured
NS - no standard established for indicated parameter
OC - organoclay
ORP - oxidation reduction potential
P - Performance well
PAC - powder activated carbon
S - Sentry well
U - Up gradient well
W FPTS - Western Foreshore Passive Treatment System

TABLE 6
FORESHORE PASSIVE TREATMENT SYSTEM INSPECTIONS (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Date	FPTS	Rip Rap layer maintained at 1.4m	Cobble layer above OBB surface layer maintained at 0.4m	Rip Rap or Cobble replacement Required	Vegetation present above treatment cells or OBB surface layer	Vegetation Removal Required	Damaged Monitoring Wells	Comments
12-Mar-20	Eastern	Yes	Yes	No	Small woody shrubs and blackberry growing along southern edge; no vegetation growth on treatment cells; some vines hanging over southern edge of riprap	Hand pulled small shrubs and trimmed vines; pulled around 25 plants; no vegetation of concern left	No	No major damage; chipping of CBP-5 and PW17-30; moderate barnacle growth on most wells. Geogrid and filter fabric exposed in ten areas (six on the Eastern FPTS and four on the Western FPTS) along the contact point between the rip rap and cobble interface. TP1: Sand from 0 - 0.13mbgs; Cobble from 0.13 - 0.42mbgs; No liner encountered TP2: Sand from 0 - 0.17mbgs; Cobble from 0.17 - 0.39 mbgs; No liner encountered TP3: Cobble from 0 - 0.38mbgs; Liner encountered
	Western	Yes	Yes	No	Growth of small weeds overtop of treatment cells; no vegetation growth of concern on northern side; vegetation branches and vines hanging over riprap barrier	Hand pulled around 10 small vegetation; no vegetation of concern left	No	
22-Jun-20	Eastern	Yes	Yes	No	Numerous 1m tall weeds growing on top of the barrier around the upgradient wells; no vegetation on top of treatment cells or OBB layer; Overhanging vegetation on southern side of the barrier are present	Hand pulled numerous weeds	No	Wells submerged at high tide have barnacle and seaweed growth on the outer casing; most wells have received minor chipping of the protective casing. Geogrid and filter fabric exposed in ten areas (six on the Eastern FPTS and four on the Western FPTS) along the contact point between the rip rap and cobble interface. TP1: Sand from 0 - 0.13mbgs; Cobble from 0.13 - 0.42mbgs; No liner encountered TP2: Sand from 0 - 0.04mbgs; Cobble from 0.04 - 0.48 mbgs; Liner encountered TP3: Cobble from 0 - 0.52mbgs; Liner encountered
	Western	Yes	Yes	No	A couple of 1m tall weeds growing on top of the barrier around the upgradient wells; no vegetation was observed on top of the treatment cells or the OBB layer; Overhanging vegetation on the southern side of the barrier are present	Hand pulled numerous weeds	No	
28-Sep-20	Eastern	Yes	Yes	No	1m of vegetation growth overhanging the barrier on the southern side; growth of small weeds overtop of treatment cells are present; pose no risk to cell integrity; no indication of vegetation growing through installed liner	Hand pulled numerous small weeds. Overhanging vegetation on the south side of the barrier should be monitored; potential removal planned in the future.	No	No major damage; all wells have barnacles and seaweed growth on the outer surface of the protective casing; minor chipping is present on the protective casing as well. Geogrid and filter fabric exposed in ten areas (six on the Eastern FPTS and four on the Western FPTS) along the contact point between the rip rap and cobble interface. TP1: Sand from 0 - 0.14mbgs; Cobble from 0.14 - 0.52mbgs; Liner encountered TP2: Sand from 0 - 0.02mbgs; Cobble from 0.02 - 0.52 mbgs; Liner encountered TP3: Cobble from 0 - 0.52mbgs; Liner encountered
	Western	Yes	Yes	No	1m of vegetation growth overhanging the barrier on the southern side; growth of small weeds overtop of treatment cells are present; pose no risk to cell integrity; no indication of vegetation growing through installed liner	Hand pulled numerous small weeds. Overhanging vegetation on the south side of the barrier should be monitored; potential removal planned in the future.	No	

TABLE 6
FORESHORE PASSIVE TREATMENT SYSTEM INSPECTIONS (2020 - 2021)
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

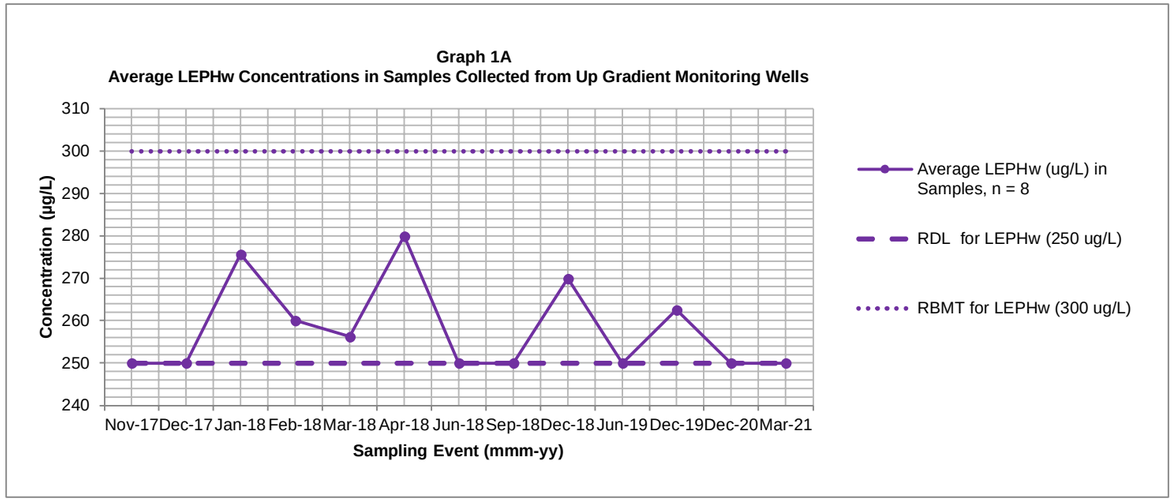
Date	FPTS	Rip Rap layer maintained at 1.4m	Cobble layer above OBB surface layer maintained at 0.4m	Rip Rap or Cobble replacement Required	Vegetation present above treatment cells or OBB surface layer	Vegetation Removal Required	Damaged Monitoring Wells	Comments
08-Dec-20	Eastern	Yes	Yes	No	1m of vegetation growth overhanging the barrier on the southern side; growth of small weeds overtop of treatment cells are present; pose no risk to cell integrity; no indication of vegetation growing through installed liner	No vegetation was removed	No	No major damage; all wells have barnacles and seaweed growth on the outer surface of the protective casing; concrete base of CBP-6 is no longer completely covered with riprap; minor chipping is present on the protective casing as well Geogrid and filter fabric exposed in ten areas (six on the Eastern FPTS and four on the Western FPTS) along the contact point between the rip rap and cobble interface. TP1: Sand from 0 - 0.08mbgs; Cobble from 0.08 - 0.42mbgs; Liner encountered TP2: Sand from 0 - 0.10mbgs; Cobble from 0.10 - 0.45 mbgs; Liner encountered TP3: Cobble from 0 - 0.53mbgs; Liner encountered
	Western	Yes	Yes	No	1m of vegetation growth overhanging the barrier on the southern side; growth of small weeds overtop of treatment cells are present; pose no risk to cell integrity; no indication of vegetation growing through installed liner	No vegetation was removed	No	
03-Mar-21	Eastern	Yes	Yes	No	No growth above treatment cells or OBB surface layer. Vegetation growth along Up Gradient wells as well as overhanging on southern edge of the barrier.	No. Hand pulled some weeds. Overhanging vegetation on the south side of the barrier should be monitored; potential removal planned in the future.	No	No major damage; all wells have barnacles and seaweed growth on the outer surface of the protective casing; minor chipping is present on the protective casing as well; J-plug replace on PW17-7. Geogrid and filter fabric exposed in ten areas (six on the Eastern FPTS and four on the Western FPTS) along the contact point between the rip rap and cobble interface. TP1: Sand from 0 - 0.03 mbgs; Cobble from 0.03 - 0.40 mbgs; Liner encountered. TP2: Sand from 0 - 0.02; Cobble from 0.02 - 0.46 mbgs; Liner encountered. TP3: Cobble from 0- 0.63 m bgs; Liner not encountered.
	Western	Yes	Yes	No	No growth above treatment cells or OBB surface layer. Vegetation growth along Up Gradient wells as well as overhanging on southern edge of barrier.	No. Hand pulled some weeds. Overhanging vegetation on the south side of the barrier should be monitored; potential removal planned in the future.	No	

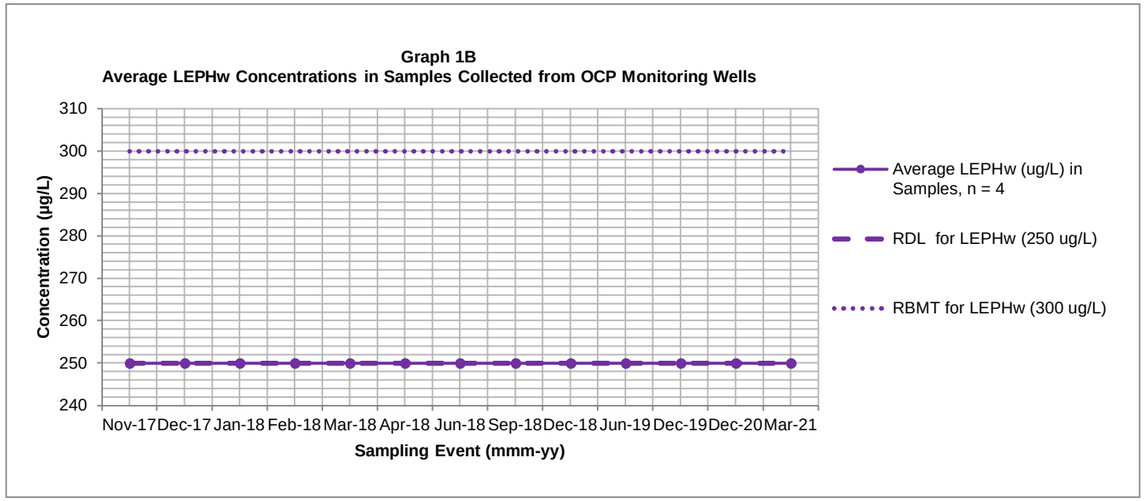
Abbreviations:

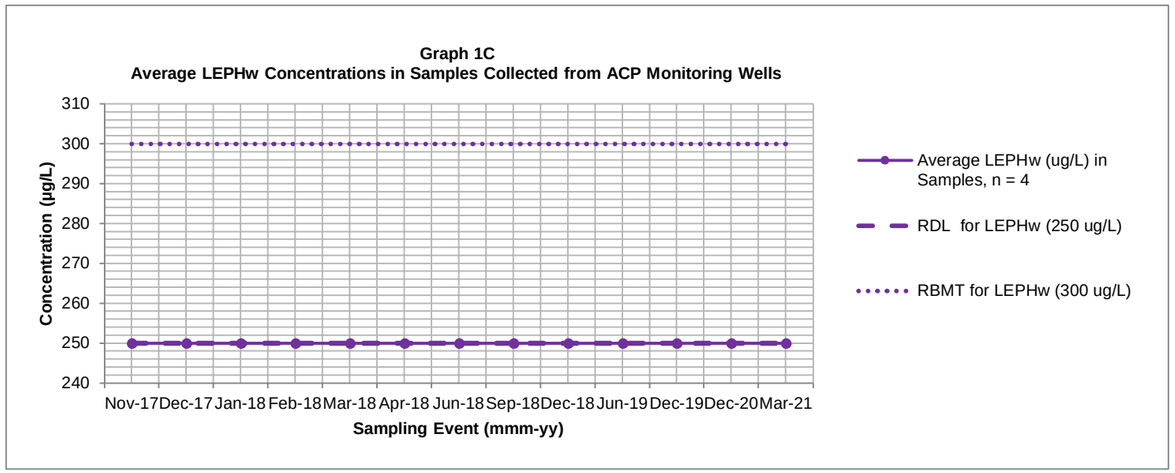
FPTS - Foreshore Passive Treatment System
NM - Not monitored
OBB - Oleophilic biobarrier
NA - Not applicable
m bgs - metres below grround surface

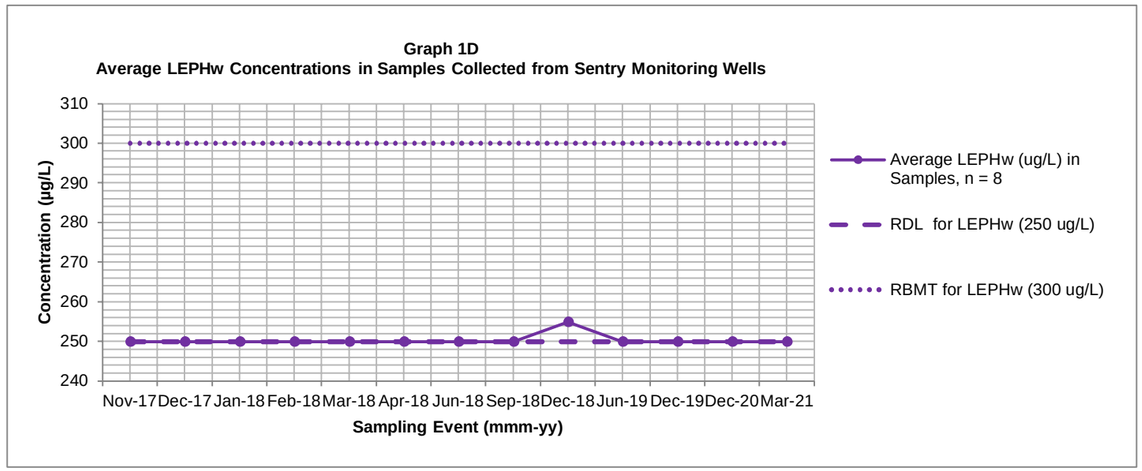
Graphs

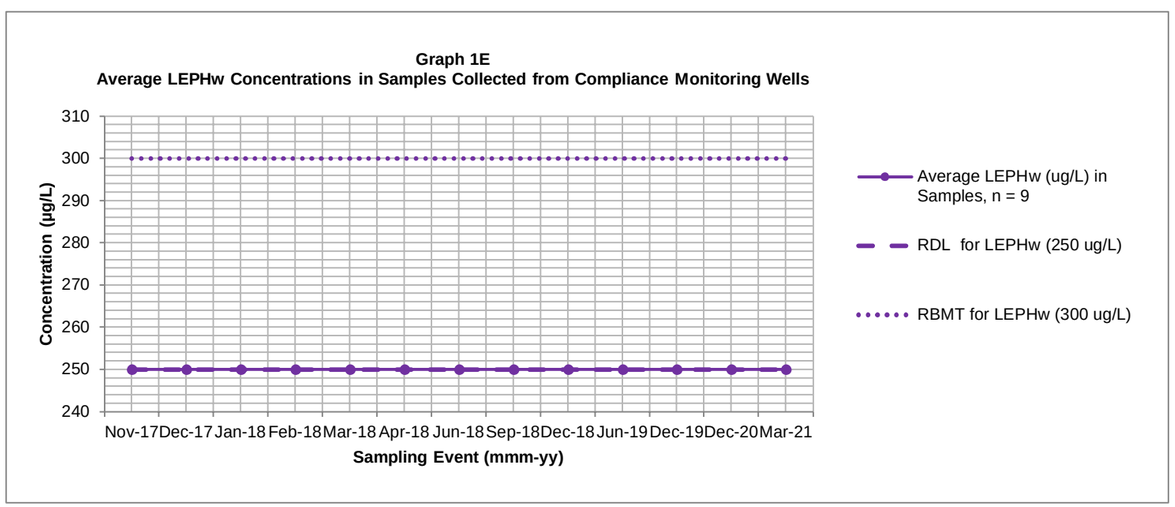
AECOM


Graph 1A
Average LEPHw Concentrations in Samples Collected from Up Gradient Monitoring Wells
Concentration (µg/L)
310
300
290
280
270
260
250
240
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 Jun-18 Sep-18 Dec-18 Jun-19 Dec-19 Dec-20 Mar-21
Sampling Event (mmm-yy)
Average LEPHw (ug/L) in Samples, n = 8
RDL for LEPHw (250 ug/L)
RBMT for LEPHw (300 ug/L)

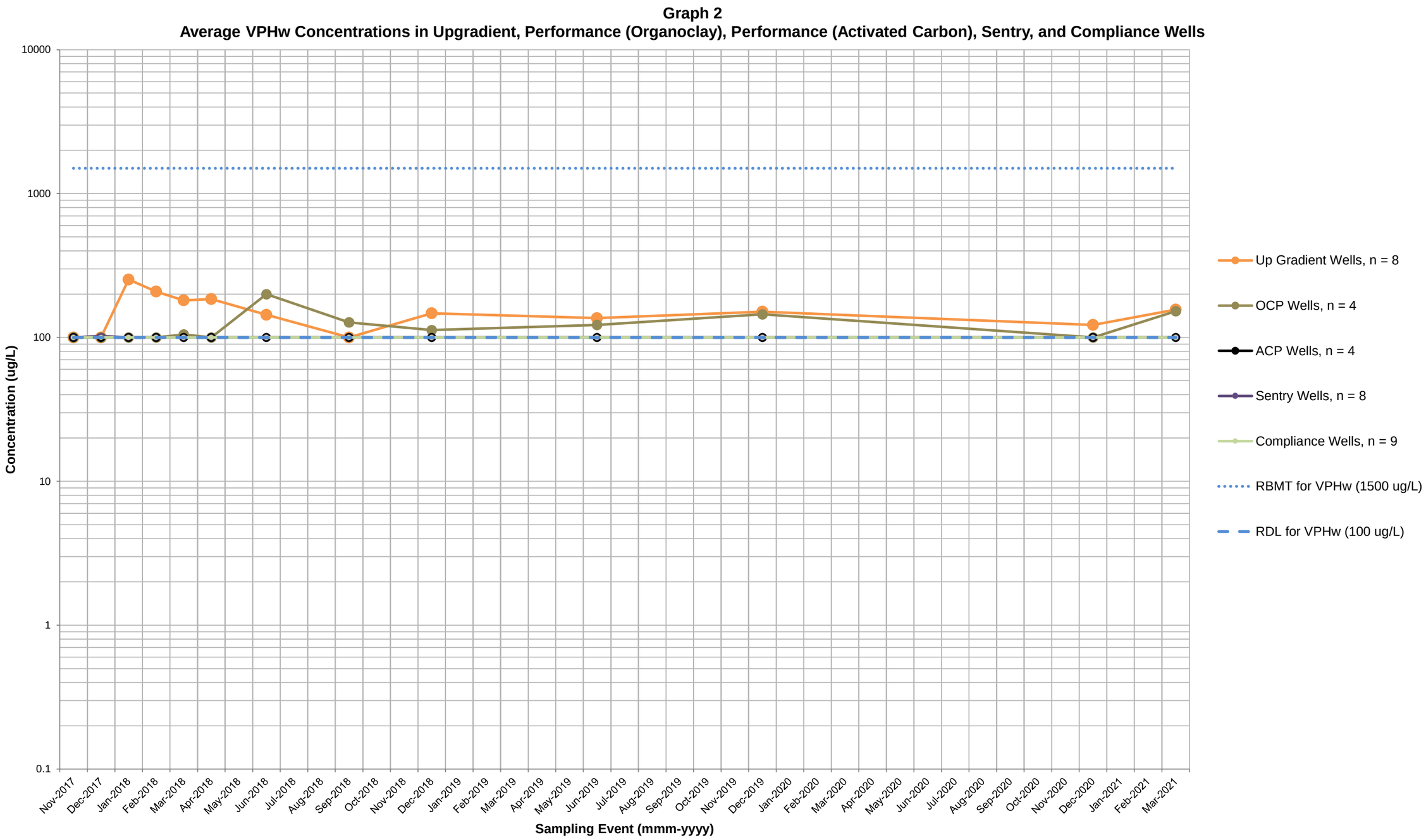

Graph 1B
Average LEPHw Concentrations in Samples Collected from OCP Monitoring Wells
Concentration (µg/L)
310
300
290
280
270
260
250
240
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 Jun-18 Sep-18 Dec-18 Jun-19 Dec-19 Dec-20 Mar-21
Sampling Event (mmm-yy)
Average LEPHw (ug/L) in Samples, n = 4
RDL for LEPHw (250 ug/L)
RBMT for LEPHw (300 ug/L)


Graph 1C
Average LEPHw Concentrations in Samples Collected from ACP Monitoring Wells
Concentration (µg/L)
310
300
290
280
270
260
250
240
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 Jun-18 Sep-18 Dec-18 Jun-19 Dec-19 Dec-20 Mar-21
Sampling Event (mmm-yy)
Average LEPHw (ug/L) in Samples, n = 4
RDL for LEPHw (250 ug/L)
RBMT for LEPHw (300 ug/L)

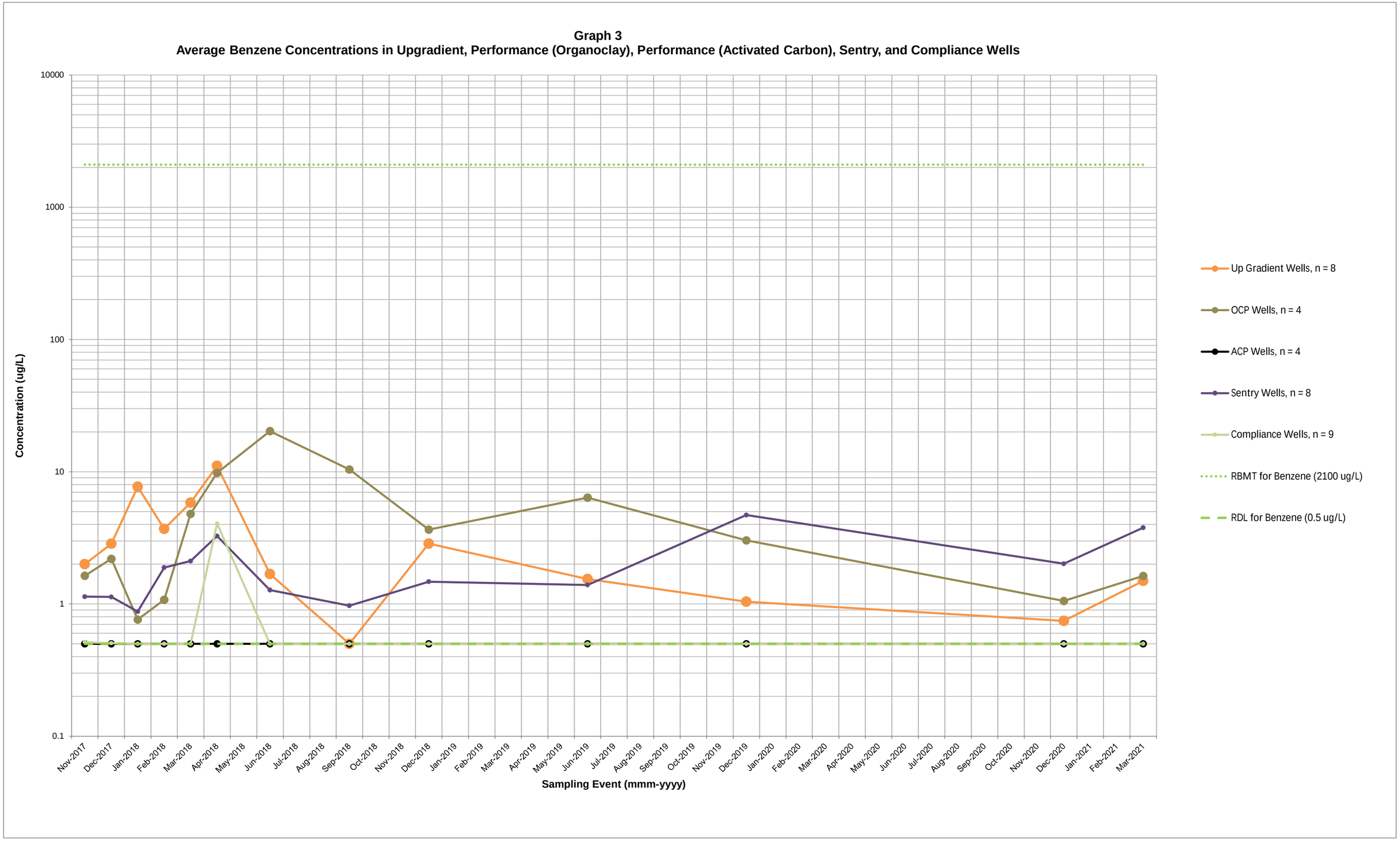

Graph 1D
Average LEPHw Concentrations in Samples Collected from Sentry Monitoring Wells
Concentration (µg/L)
310
300
290
280
270
260
250
240
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 Jun-18 Sep-18 Dec-18 Jun-19 Dec-19 Dec-20 Mar-21
Sampling Event (mmm-yy)
Average LEPHw (ug/L) in Samples, n = 8
RDL for LEPHw (250 ug/L)
RBMT for LEPHw (300 ug/L)


Graph 1E
Average LEPHw Concentrations in Samples Collected from Compliance Monitoring Wells
Concentration (µg/L)
310
300
290
280
270
260
250
240
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 Jun-18 Sep-18 Dec-18 Jun-19 Dec-19 Dec-20 Mar-21
Sampling Event (mmm-yy)
Average LEPHw (ug/L) in Samples, n = 9
RDL for LEPHw (250 ug/L)
RBMT for LEPHw (300 ug/L)

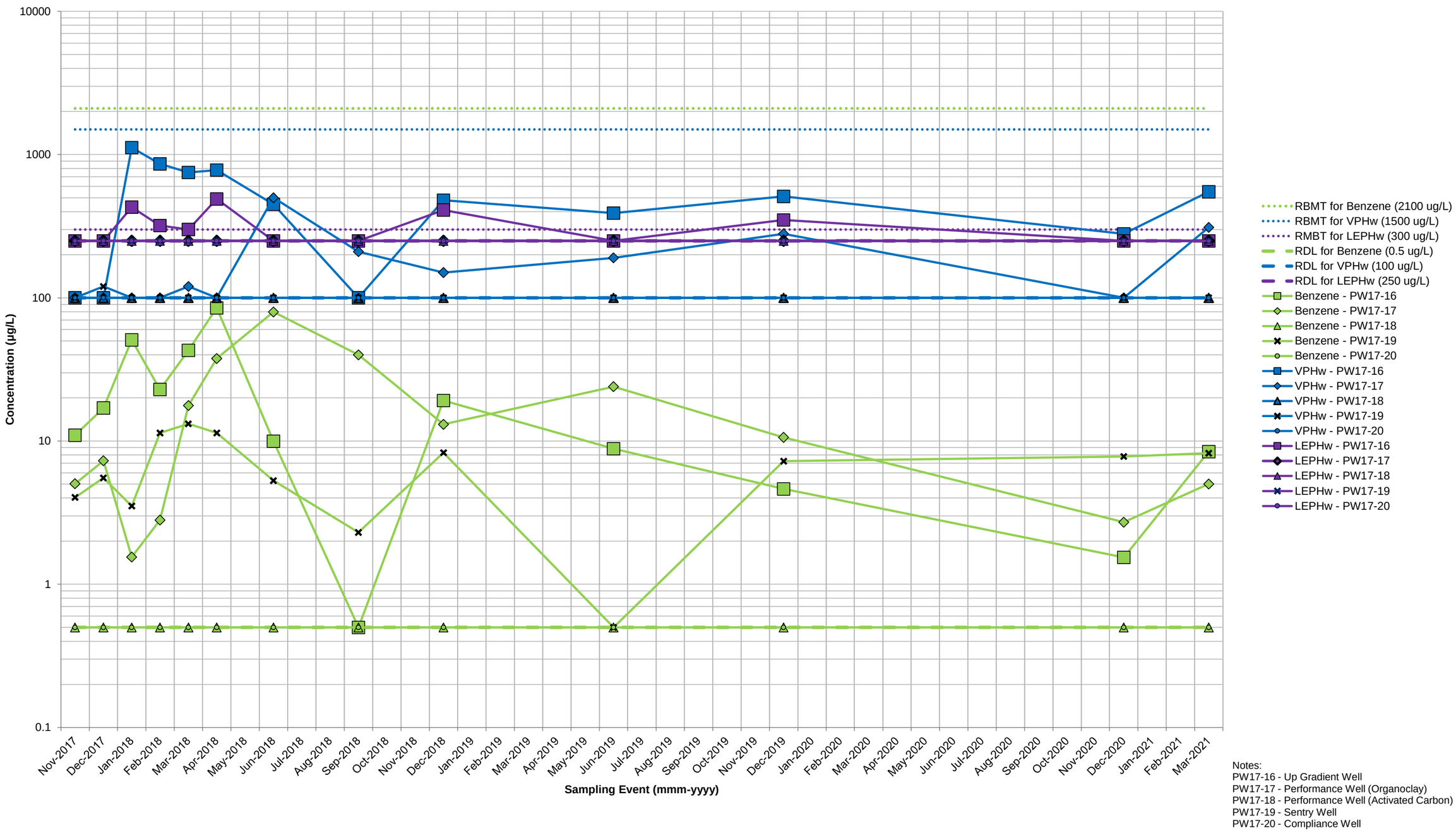
GRAPH 2, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021



GRAPH 3, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021

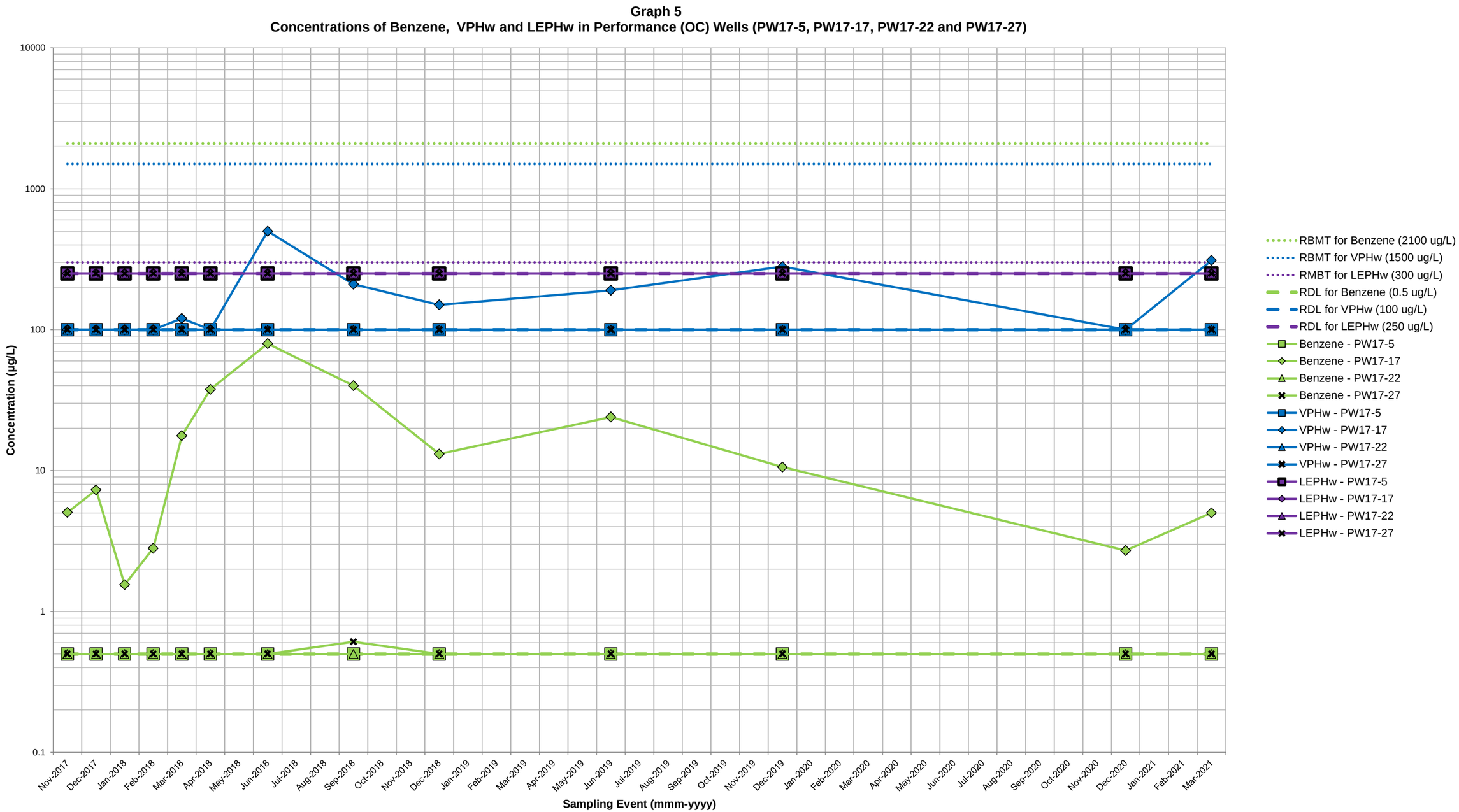


GRAPH 4, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021



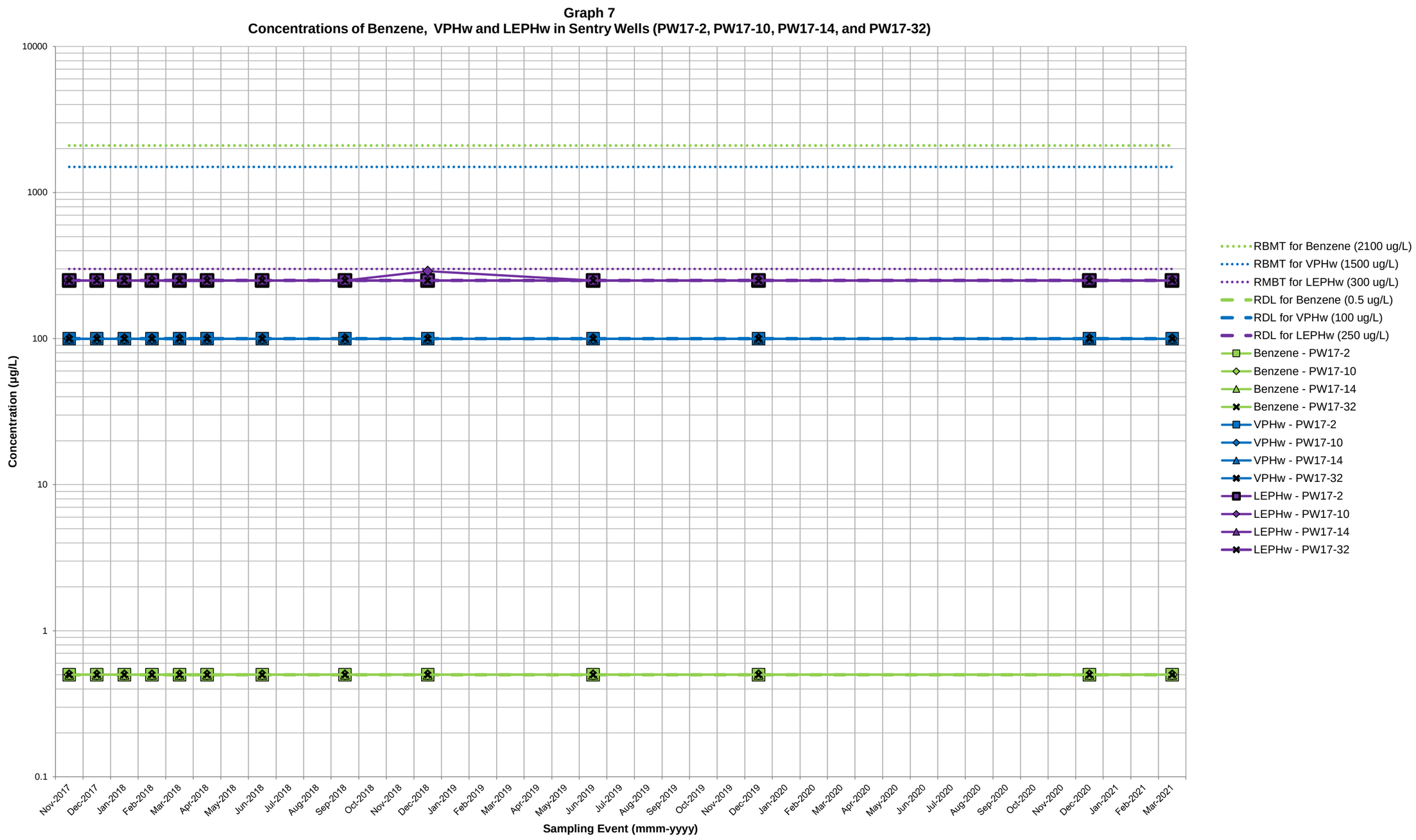
Notes:
PW17-16 - Up Gradient Well
PW17-17 - Performance Well (Organoclay)
PW17-18 - Performance Well (Activated Carbon)
PW17-19 - Sentry Well
PW17-20 - Compliance Well

GRAPH 5, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021

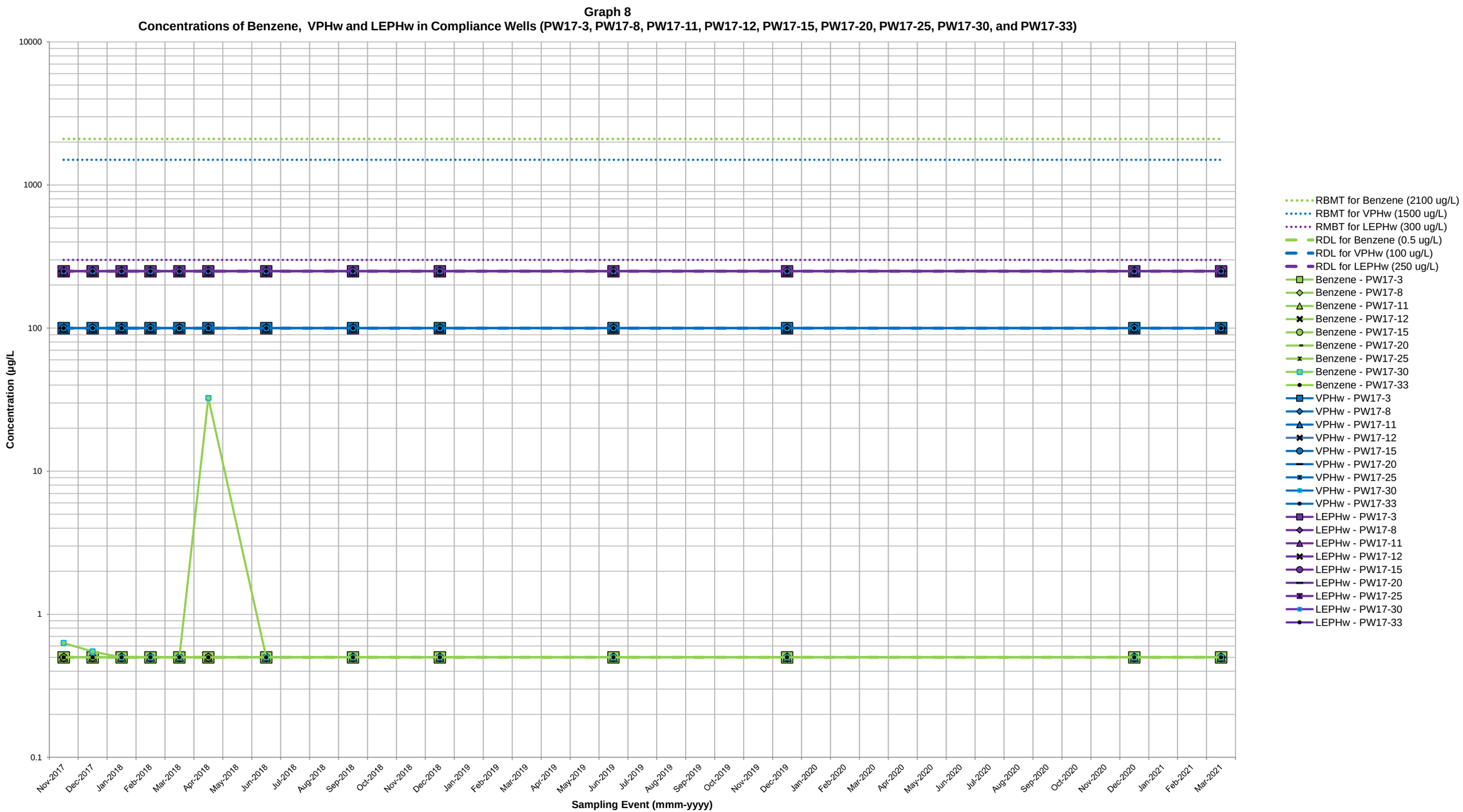


GRAPH 6, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021

GRAPH 7, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021



GRAPH 8, FORESHORE 2020 AND 2021 MONITORING REPORT, PARKLAND BURNABY REFINERY, MAY 2021



Appendix A

Original and Corrected Historical Water Analytical Tables, 2011-2019

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID[4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Laboratory Report	$LEPH_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Post-Construction FPTS																		
P3-6-NBO	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-NBO	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P3-6-NBO	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-NBO	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-NBO	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P3-6-O	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-O	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P3-6-O	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-O	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-6-O	Surface Water	PW17-06	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P3-12-NBO	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP1 (P3-12-NBO)	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											11-Dec-17		---	---	---	---	---	---
P3-12-NBO	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P3-12-NBO	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-5 (P3-12-NBO)	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											14-Jun-18		---	---	---	---	---	---
P3-12-NBO	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	13-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-12-NBO	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-2 (P3-12-NBO)	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											3-Dec-18		---	---	---	---	---	---
P3-12-O	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-12-O	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P3-12-O	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-12-O	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P3-12-O	Surface Water	PW17-08	ALS	GC-MS/FID	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P6-6-NBO	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-NBO	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	**0.79**	<0.75
P6-6-NBO	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-NBO	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-NBO	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P6-6-O	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-O	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P6-6-O	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-O	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-6-O	Surface Water	PW17-18	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P6-12-NBO	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-12-NBO	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P6-12-NBO	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	13-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-12-NBO	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P6-12-O	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-12-O	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
DUP 5 (P6-12-O)	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
QA/QC RPD											20-Mar-18		---	---	---	---	---	---
P6-12-O	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P6-12-O	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID[4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Laboratory Report	$LEPH_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
DUP-5 (P6-12-O)	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.45	<0.75
QA/QC RPD											12-Sep-18		---	---	---	---	---	---
P6-12-O	Surface Water	PW17-20	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P8-6-NBO	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-NBO	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-NBO	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-NBO	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-NBO	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P8-6-O	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-O	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P8-6-O	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-O	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-6-O	Surface Water	PW17-28	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
P8-12-NBO	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-NBO	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P8-12-NBO	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-NBO	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-NBO	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-1 (P8-12-NBO)	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											3-Dec-18		---	---	---	---	---	---
P8-12-O	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-O	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<250.	<100.	<0.5	<0.5	<0.45	<0.75
P8-12-O	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-O	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<250.	<100.	<0.5	<0.5	<0.5	<0.75
P8-12-O	Surface Water	PW17-30	ALS	GC-MS/FID	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-1	Porewater	CBP-1	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-1	Porewater	CBP-1	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-1	Porewater	CBP-1	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-2	Porewater	CBP-2	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-2	Porewater	CBP-2	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-2	Porewater	CBP-2	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-5	Porewater	CBP-5	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-5	Porewater	CBP-5	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-5	Porewater	CBP-5	ALS	GC-MS/FID	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-6	Porewater	CBP-6	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-6	Porewater	CBP-6	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-6	Porewater	CBP-6	ALS	GC-MS/FID	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-7	Porewater	CBP-7	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-1(CBP-7)	Porewater	CBP-7	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											13-Jun-18		---	---	---	---	---	---
CBP-7	Porewater	CBP-7	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-7	Porewater	CBP-7	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-8	Porewater	CBP-8	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-8	Porewater	CBP-8	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
CBP-8	Porewater	CBP-8	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
CBP-15	Porewater	CBP-15	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-15	Porewater	CBP-15	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-15	Porewater	CBP-15	ALS	GC-MS/FID	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	6-Dec-18	L2207439	<250	<100	**2.51**	<0.50	<0.50	<0.75
CBP-16	Porewater	CBP-16	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-16	Porewater	CBP-16	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
CBP-16	Porewater	CBP-16	ALS	GC-MS/FID	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP1 (PW17-01)	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											14-Nov-17		---	---	---	---	---	---
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-01	Porewater	PW17-01	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-02	Porewater	PW17-02	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	23-Mar-18	L2071889	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	**1.13**	**1.66**	**5.5**
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-03	Porewater	PW17-03	ALS	GC-MS/FID	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	23-Mar-18	L2071889	<250.	<100.	<0.5	<0.5	<0.5	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-04	Porewater EAZ	PW17-04	ALS	GC-MS/FID	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP2 (PW17-05)	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											13-Dec-17		---	---	---	---	---	---
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	23-Mar-18	L2071889	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-05	Porewater EAZ	PW17-05	ALS	GC-MS/FID	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	23-Mar-18	L2071889	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-06	Porewater	PW17-06	ALS	GC-MS/FID	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-08	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-08	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-08	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-08	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Dec-18	L2205028	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-07	Porewater EAZ	PW17-07	ALS	GC-MS/FID	S	W FPTS	0.70-1.00	0.7	1	Beach sand	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	**0.71**	**1.15**	**3.72**
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Dec-18	L2205028	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-08	Porewater	PW17-08	ALS	GC-MS/FID	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-09	Porewater	PW17-09	ALS	GC-MS/FID	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10 Bottle 1[3]	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	**480.**	<100	<0.50	<0.50	<0.50	<0.75
PW17-10 Bottle 2[3]	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<250	---	---	---	---	---
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-10	Porewater	PW17-10	ALS	GC-MS/FID	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	**0.54**	**0.8**	**2.81**
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Dec-18	L2205028	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-11	Porewater	PW17-11	ALS	GC-MS/FID	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-12	Porewater	PW17-12	ALS	GC-MS/FID	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID[4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Laboratory Report	$LEPH_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-13	Porewater	PW17-13	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-14	Porewater	PW17-14	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-15	Porewater	PW17-15	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	<250.	<100.	**11.**	**9.62**	<0.5	**4.46**
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<250.	<100.	**17.**	**13.**	<0.5	**2.85**
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	**430.**	**1120.**	**50.9**	**120.**	**0.91**	**19.**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	**410.**	**1250.**	**53.**	**115.**	**0.99**	**19.**
QA/QC RPD											16-Jan-18		---	11.0%	4.0%	4.3%	---	0.0%
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	**290.**	**800.**	**20.**	**4.1**	<0.5	**4.43**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	**320.**	**860.**	**22.9**	**7.61**	<0.5	**4.33**
QA/QC RPD											14-Feb-18		---	7.2%	13.5%	59.9%	---	2.3%
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	**300.**	**750.**	**43.**	**26.7**	**0.58**	**5.3**
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	**490.**	**780.**	**85.1**	**132.**	**1.24**	**28.3**
DUP-1(PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	NA	18-Apr-18	L2081868	**550.**	**880.**	**70.8**	**108.**	**1.12**	**23.**
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<250.	**450.**	**9.99**	**9.**	<0.5	<0.75
DUP-2(PW17-16)	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<250.	**410.**	**9.83**	**8.57**	<0.5	<0.75
QA/QC RPD											13-Jun-18		---	---	1.6%	4.9%	---	---
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	<250.	<100.	<0.5	**0.96**	<0.5	<0.75
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	**410.**	**480.**	**19.2**	**61.**	**0.53**	**1.28**
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<250	**390.**	**8.85**	**7.33**	<0.50	<0.75
PW17-16	Porewater EAZ	PW17-16	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	**350.**	**510.**	**4.63**	**8.14**	<0.50	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<250.	<100.	**5.04**	<0.5	<0.5	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	**7.29**	**1.81**	<0.5	<0.75
DUP3 (PW17-17)	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	**7.62**	**1.85**	<0.5	<0.75
QA/QC RPD											13-Dec-17		---	---	4.4%	---	---	---
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	**1.55**	<0.5	<0.5	<0.75
DUP2 (PW17-17)	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	**1.59**	<0.5	<0.5	<0.75
QA/QC RPD											16-Jan-18		---	---	---	---	---	---
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<250.	<100.	**2.81**	<0.5	<0.5	<0.75
DUP2 (PW17-17)	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<250.	<100.	**2.82**	<0.5	<0.5	<0.75
QA/QC RPD											14-Feb-18		---	---	0.4%	---	---	---
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<250.	**120.**	**17.7**	**0.69**	<0.5	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<250.	<100.	**37.7**	**1.98**	<0.5	<0.75
DUP-2(PW17-17)	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	NA	18-Apr-18	L2081868	<250.	<100.	**38.4**	**1.99**	<0.5	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	<250.	**500.**	**79.6**	**10.3**	**0.56**	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<250.	**210.**	**40.**	**0.52**	<0.5	<0.75
DUP-1 (PW17-17)	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<250.	**250.**	**41.9**	<0.5	<0.5	<0.75
QA/QC RPD											11-Sep-18		---	---	4.6%	---	---	---
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<250	**150.**	**13.1**	**0.64**	<0.50	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<250	**190.**	**24.**	**0.84**	<0.50	<0.75
PW17-17	Porewater EAZ	PW17-17	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<250	**280.**	**10.6**	<0.50	<0.50	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP3 (PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											15-Nov-17		---	---	---	---	---	---
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP3 (PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											16-Jan-18		---	---	---	---	---	---
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP3 (PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											14-Feb-18		---	---	---	---	---	---
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-3(PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-3(PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											13-Jun-18		---	---	---	---	---	---
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-2 (PW17-18)	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											11-Sep-18		---	---	---	---	---	---
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-18	Porewater	PW17-18	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	**4.04**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Dec-17	L2034402	<250.	**120.**	**5.53**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	15-Jan-18	L2045142	<250.	<100.	**3.52**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	13-Feb-18	L2056920	<250.	<100.	**11.4**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	21-Mar-18	L2070802	<250.	<100.	**13.2**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	16-Apr-18	L2080621	<250.	<100.	**11.4**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Jun-18	L2111276	<250.	<100.	**5.29**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Sep-18	L2161513	<250.	<100.	**2.3**	<0.5	<0.5	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Dec-18	L2205928	<250	<100	**8.29**	<0.50	<0.50	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-19	Porewater	PW17-19	ALS	GC-MS/FID	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Dec-19	L2395326	<250	<100	**7.23**	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-20	Porewater EAZ	PW17-20	ALS	GC-MS/FID	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Nov-17	---	Monitoring well not sampled - infilled					
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-17	---	Monitoring well not sampled - infilled					
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	---	Monitoring well not sampled - infilled					
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	---	Monitoring well not sampled - infilled					
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<250.	<100.	**0.67**	<0.5	<0.5	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	<250	<100	**0.7**	<0.50	<0.50	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-21	Porewater EAZ	PW17-21	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<250	<100	**0.7**	<0.50	<0.50	<0.75
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											13-Dec-17		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											16-Jan-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											15-Feb-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 4(PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-4(PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP-4(PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-3 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											5-Dec-18		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-2 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											5-Jun-19		---	---	---	---	---	---
PW17-22	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-1 (PW17-22)	Porewater EAZ	PW17-22	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	**1.08**	**0.9**
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-4 (PW17-23)	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											6-Dec-18		---	---	---	---	---	---
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-3 (PW17-23)	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											5-Jun-19		---	---	---	---	---	---
PW17-23	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-2 (PW17-23)	Porewater	PW17-23	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-24	Porewater	PW17-24	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP2 (PW17-25)	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											14-Nov-17		---	---	---	---	---	---
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-25	Porewater	PW17-25	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID[4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Laboratory Report	$LEPH_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<250.	**150.**	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 1 (PW17-26)	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 1 (PW17-26)	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											6-Jun-19		---	---	---	---	---	---
PW17-26	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP 3 (PW17-26)	Porewater EAZ	PW17-26	ALS	GC-MS/FID	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 2(PW17-27)	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	<250.	<100.	**0.61**	<0.5	<0.5	<0.75
DUP-3(PW17-27)	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	<250.	<100.	**0.54**	<0.5	<0.5	<0.75
QA/QC RPD											12-Sep-18		---	---	---	---	---	---
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
DUP-5 (PW17-27)	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											6-Dec-18		---	---	---	---	---	---
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Jun-19	L2287095	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-27	Porewater EAZ	PW17-27	ALS	GC-MS/FID	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID[4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Laboratory Report	$LEPH_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 3(PW17-28)	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											22-Mar-18		---	---	---	---	---	---
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
DUP 4(PW17-28)	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
QA/QC RPD											12-Sep-18		---	---	---	---	---	---
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	**0.5**	<0.75
DUP-6 (PW17-28)	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<250	<100	<0.50	<0.50	<0.50	<0.75
QA/QC RPD											6-Dec-18		---	---	---	---	---	---
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Jun-19	L2287095	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-28	Porewater	PW17-28	ALS	GC-MS/FID	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<250.	<100.	**2.04**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<250.	<100.	**0.52**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Feb-18	L2056918	<250.	<100.	**0.69**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<250.	<100.	**0.67**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<250.	<100.	**11.7**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<250.	<100.	**1.91**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	<250.	<100.	**2.46**	<0.5	<0.5	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Jun-19	L2285149	<250	<100	**7.64**	<0.50	<0.50	<0.75
PW17-29	Porewater	PW17-29	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	<250	<100	**27.4**	<0.50	<0.50	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Nov-17	L2022366	<250.	<100.	**0.63**	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	<250.	<100.	**0.55**	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	<250.	<100.	**32.5**	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-30	Porewater	PW17-30	ALS	GC-MS/FID	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-31	Porewater	PW17-31	ALS	GC-MS/FID	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-32	Porewater	PW17-32	ALS	GC-MS/FID	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
PW17-33	Porewater	PW17-33	ALS	GC-MS/FID	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK 1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Nov-17	L2023092	<250.	<100.	<0.5	<0.5	<0.5	<0.75
RINSATE-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Dec-17	L2033765	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Jan-18	L2045142	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Nov-17	L2023753	<250.	<100.	<0.5	<0.5	<0.5	<0.75
RINSATE-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Dec-17	L2034402	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Jan-18	L2045816	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Dec-17	L2035368	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Feb-18	L2056920	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Feb-18	L2056918	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Feb-18	L2057618	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Apr-18	L2080621	---	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	17-Apr-18	L2081248	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Jun-18	L2111276	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Jun-18	L2111824	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112662	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Sep-18	L2161513	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Sep-18	L2162362	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163271	<250.	<100.	<0.5	<0.5	<0.5	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	4-Dec-18	L2205928	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	5-Dec-18	L2206732	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	4-Jun-19	L2285149	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	5-Jun-19	L2286145	<250	<100	<0.50	<0.50	<0.50	<0.75
R-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Dec-19	L2395326	<250	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
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FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
R-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Dec-19	L2395640	<250	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Nov-17	L2022366	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Nov-17	L2023092	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Nov-17	L2023753	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Dec-17	L2033765	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Dec-17	L2034402	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Dec-17	L2035368	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Nov-17	L2022366	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Nov-17	L2023092	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Dec-17	L2034402	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Dec-17	L2035368	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Jan-18	L2045142	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Jan-18	L2045142	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Jan-18	L2045816	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Jan-18	L2045816	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Feb-18	L2056920	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Feb-18	L2056918	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Feb-18	L2056918	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	15-Feb-18	L2057618	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	20-Mar-18	L2070135	---	<100.	<0.5	<0.5	<0.45	<0.75
T-BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	22-Mar-18	L2071404	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	23-Mar-18	L2071889	---	<100.	<0.5	<0.5	<0.5	<0.75
T-BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	16-Apr-18	L2080621	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	17-Apr-18	L2081248	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	18-Apr-18	L2081868	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Jun-18	L2111276	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Jun-18	L2111276	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Jun-18	L2111824	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Jun-18	L2111824	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112693	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-6	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112693	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-7	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112662	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Sep-18	L2161513	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Sep-18	L2161513	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Sep-18	L2162362	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Sep-18	L2162362	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163271	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163271	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-7	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163427	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-8	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163427	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-6	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	13-Sep-18	L2164036	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205028	---	<100.	<0.5	<0.5	<0.5	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	4-Dec-18	L2205928	---	<100	<0.50	<0.50	<0.50	<0.75

TABLE A1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													LEPH$_w$	VPHw	Benzene	Ethylbenzene	Toluene	Xylenes
Upper Cap Concentrations[1]													5,000	15,000	10,000	25000	20,000	3,000
RBMT[2]													300	1,500	2,100	320	770	330
Reported Detection Limit													250	100	0.5	0.5	0.5	0.5, 0.75
Sample ID[4]	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Laboratory Report**						
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	5-Dec-18	L2206732	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-6	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	6-Dec-18	L2207439	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	4-Jun-19	L2285149	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	4-Jun-19	L2285149	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	5-Jun-19	L2286145	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	5-Jun-19	L2286145	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	6-Jun-19	L2287095	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-1	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Dec-19	L2395326	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-2	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	10-Dec-19	L2395326	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-3	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Dec-19	L2395640	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-4	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	11-Dec-19	L2395640	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-5	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Dec-19	L2396150	---	<100	<0.50	<0.50	<0.50	<0.75
TRAVEL BLANK-6	NA	NA	ALS	NA	NA	NA	NA	NA	NA	NA	12-Dec-19	L2396150	---	<100	<0.50	<0.50	<0.50	<0.75

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.

1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.
3 - Analysis was performed on each bottle submitted for the desired parameter instead of on the submitted bottles collectively.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
DL - detection limit
E FPTS - Eastern Foreshore Passive Treatment System
GC-MS/FID - Gas Chromotography - Mass Spectrometry / Flame Ionization Detection
IBA - In between area
LEPHw - light extractable petroleum hydrocarbons in water
NA - not applicable
NBO - near bottom samples
NS - no standard established for indicated parameter
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
U - Up gradient well (Post-construction)
VPHw - volatile petroleum hydrocarbons in water
W FPTS - Western Foreshore Passive Treatment System

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
Pre-Construction FPTS																																				
PSI Samples																																				
P6-3	*	Porewater EAZ	P6-3	ALS	DCM	NA	EB	0.50-0.70	0.50	0.70	Weathered Colluvium	---	16-Jul-10	2,740	2,740	1,550	2,800	---	2,800	---	---	---	1,550	---	1,550	---	---	---	1,120	4,580	2,910	270	<1.0	7.9	266	---
P8-0-A	*	Porewater EAZ	P8-0	ALS	DCM	NA	EB	0.05-0.15	0.05	0.15	Beach sand	---	16-Jul-10	8,740	8,740	5,950	8,790	---	8,790	---	---	---	5,950	---	5,950	---	---	---	3,200	10,300	778	492	<5.0	2,450	3,390	---
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP-15 (P6-3)	*	Porewater EAZ	P6-3	ALS	DCM	NA	EB	0.50-0.70	0.50	0.70	Weathered Colluvium	---	16-Jul-10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1,420	4,550	2,670	229	<1.0	6.6	220	---
RINSE1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Jul-10	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<1.0	---
TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Jul-10	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
DSI Samples																																				
Western IRA Barrier																																				
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	NA	WB	0.7-0.9	0.7	0.9	Beach sand	---	23-Feb-11	530	530	5,500	530	---	530	---	---	---	5,500	---	5,500	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-May-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Jun-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3-3-W	#	Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	20-Apr-11	10,200	10,200	8,530	10,200	10,200	10,200	8,900	8,900	8,900	8,540	8,540	8,540	6,650	6,650	6,650	540	550	<0.50	<0.50	<0.50	<1.0	1.36	---
P3-7D		Porewater	P3-7	ALS	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Feb-11	1,350	1,350	11,100	1,350	---	1,350	---	---	---	11,100	---	11,100	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	21-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3-12D		Porewater	P3-12	ALS	DCM	NA	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Feb-11	<250	<250	270	<250	---	<250	---	---	---	270	---	270	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3R-7S		Porewater EAZ	P3R-7	ALS	DCM	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	18-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	18-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	18-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3.5-7S		Porewater EAZ	P3.5-7	ALS	DCM	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	22-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	0.79	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	NA	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Feb-11	450	450	2,410	450	---	450	---	---	---	2,410	---	2,410	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
Eastern IRA Barrier																																				
P5-3-0.4S		Grab sample	P5-3	ALS	DCM	NA	EB	Grab sample	Grab sample	Grab sample	---	---	11-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-3S		Porewater EAZ	P5-3	ALS	DCM	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.75	<0.50	<0.50	2.1	0.90	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	1.06	---
P5-3D		Porewater	P5-3	ALS	DCM	NA	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	23-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	1.11	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	1,690	4,090	30.9	291	<2.5	739	1,330	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Jun-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P5.5-3-W	#	Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	19-Apr-11	420	420	440	420	---	420	---	---	---	440	---	440	---	---	---	140	400	220	26.7	<0.50	<1.0	13.1	---
P6-3S	*	Porewater EAZ	P6-3	ALS	DCM	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	25-Jan-11	1,560	1,560	2,140	1,570	---	1,570	---	---	---	2,140	---	2,140	---	---	---	1,450	2,620	705	191	<2.5	6.1	261	---
P6-3S	*	Porewater EAZ	P6-3	ALS	DCM	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	11-Feb-11	2,110	2,110	350	2,150	---	2,150	---	---	---	350	---	350	---	---	---	---	---	---	---	---	---	---	---
P6-3I	*	Porewater EAZ	P6-3	ALS	DCM	NA	EB	0.5-0.7	0.5	0.7	Weathered Colluvium	---	9-Feb-11	2,040	2,040	260	2,090	---	2,090	---	---	---	260	---	260	---	---	---	2,030	3,860	949	335	<5.0	<10	550	---
P6-3D	*	Porewater	P6-3	ALS	DCM	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	2,210	2,210	300	2,260	---	2,260	---	---	---	300	---	300	---	---	---	1,910	3,320	825	243	<5.0	<10	337	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Apr-11	280	280	<250	280	---	280	---	---	---	<250	---	<250	---	---	---	<100	<100	37.4	<0.50	<0.50	<1.0	0.87	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	24.3	<0.50	<0.50	<1.0	3.34	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	19.8	<0.50	<0.50	<1.0	1.65	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	4.02	<0.50	<0.50	<1.0	<0.84	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Feb-11	<250	<250	440	<250	---	<250	---	---	---	440	---	440	---	---	---	<100	<100	1.31	<0.50	<0.50	<1.0	<0.71	---
P7-3-W	#	Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Apr-11	500	500	280	500	---	500	---	---	---	280	---	280	---	---	---	230	610	155	25.9	<0.50	41.4	155	---
P8-3S	*	Porewater EAZ	P8-3	ALS	DCM	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	160	210	8.77	12.4	<0.50	1.8	24.2	---
P8-3S	*	Porewater EAZ	P8-3	ALS	DCM	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Feb-11	350	350	<250	350	---	350	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P8-3D	*	Porewater EAZ	P8-3	ALS	DCM	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	27-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	340	370	2.75	1.51	0.54	2.4	26.2	---
P8-3D	*	Porewater EAZ	P8-3	ALS	DCM	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	8-Feb-11	510	510	<250	510	---	510	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.86	<0.50	<0.50	<1.0	<0.71	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	35.1	1.79	<0.50	<1.0	0.85	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	6-Apr-11	<250	<250	280	<250	---	<250	---	---	---	280	---	280	---	---	---	<100	120	70.5	5.32	<0.50	<1.0	2.00	---
P8-12S		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	28-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P8-12S		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	28-Jan-11	800	800	2,030	800	---	800	---	---	---	2,040	---	2,040	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Feb-11	<280	<280	<280	<280	---	<280	---	---	---	<280	---	<280	---	---	---	---	---	---	---	---	---	---	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P9-3-W	#	Porewater EAZ	P9-3	ALS	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	20-Apr-11	<250	<250	260	<250	---	<250	<250	<250	<250	260	260	260	<250	<250	<250	110	130	1.42	1.09	<0.50	1.6	11.6	---
P9-7S		Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P9-7I		Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.98	<0.50	<0.50	<1.0	<0.71	---
P9-7D		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.18	<0.50	<0.50	<1.0	<0.71	---
P10-3S		Porewater EAZ	P10-3	ALS	DCM	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	1.44	<0.50	5.8	7.83	---
P10-3I		Porewater EAZ	P10-3	ALS	DCM	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	2.77	<0.50	8.5	16.4	---
P10-3D		Porewater	P10-3	ALS	DCM	NA	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	5.64	<0.50	<0.50	<1.0	1.35	---
Culvert Runoff Area																																				
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	11-Feb-11	<250	<250	1,340	<250	---	<250	---	---	---	1,340	---	1,340	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	25-Jan-11	<250	<250	350	<250	---	<250	---	---	---	350	---	350	---	---	---	<100	<100	<0.50	2.47	<0.50	2.8	13.9	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	28-Jan-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Jun-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	11-Feb-11	410	410	3,010	410	---	410	---	---	---	3,010	---	3,010	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	<0.50
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	19-Apr-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Feb-11	490	490	590	490	---	490	---	---	---	590	---	590	---	---	---	<100	280	<0.50	<0.50	<0.50	375	<0.71	0.98
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Feb-11	530	530	<250	530	---	530	<250	---	<250	<250	---	<250	<280	---	<280	<110	460	<0.50	<0.50	<0.50	578	<0.71	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Apr-11	Well Not Sampled																						
P14-17S		Porewater EAZ	P14-17	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	19-Apr-11	Well Not Sampled - Insufficient Water for Analysis																						
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	19-Apr-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.75	<0.50	<0.50	<1.0	<0.71	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	20-Apr-11	Well Not Sampled - Insufficient Water for Analysis																						
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	20-Apr-11	<250	<250	260	<250	---	<250	<250	<250	<250	260	260	260	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	14-Jun-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
Reference Area																																				
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<1.0	<0.71	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<1.0	<0.71	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	20-Apr-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-May-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	20-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	3,080	1,910 CR	5,860 CR	3,080	1,910 CR	1,910 CR	3,090	1,860 CR	1,860 CR	7,130	5,880 CR	5,880 CR	8,130	6,820 CR	6,820 CR	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.54	<0.50	<0.50	<1.0	<0.75	---
Seawater																																				
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	NA	NA	NA	---	---	9-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.73	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	NA	NA	NA	---	---	10-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	1.4	0.92	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	27-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	1.48	0.53	<0.50	<1.0	1.83	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	9-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	1.1	0.84	<0.50
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	27-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	0.76	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	9-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	<0.50
P14-3-O		Surface Water	P14-3	ALS	DCM	NA	CL	NA	NA	NA	---	---	27-Jan-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P14-12-O		Surface Water	P14-12	ALS	DCM	NA	CL	NA	NA	NA	---	---	7-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR-2S		Surface Water	PR2	ALS	DCM	NA	RL	NA	NA	NA	---	---	8-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100 UJ	<0.50	<0.50	<0.50	<1.0	<0.71	---
PR-S-W		Surface Water	PEC	ALS	DCM	NA	RL	NA	NA	NA	---	---	7-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
PEC-3-O		Surface Water	PEC-3	ALS	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
PEC-12-O		Surface Water	PEC-12	ALS	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP-2 (P8-12D)		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
DUP-2 (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
DUP-3 (P8-12-O)		Surface Water	P8-12	ALS	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	<0.50
DUP-3 (P14-17D)		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
DUP-4 (P6-3D)	*	Porewater	P6-3	ALS	DCM	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	2,300	2,300	260	2,250	---	**2,250**	---	---	---	260	---	**260**	---	---	---	2,960	4,680	890	324	<5.0	<10	510	---
DUP-4 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
DUP-5 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
DUP-6 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	<0.50
DUP-7 (PR2-3-O)		Surface Water	PR2-3	ALS	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.75	---
DUP-GW1 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**2.12**	<0.50	<0.50	<1.0	<0.71	---
Travel Blank		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	28-Jan-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
Trip Blank		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Feb-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.71	---
Monitoring Samples																																				
Western IRA Barrier																																				
P2.5-7S		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	Well Not Sampled - Insufficient Water for Analysis																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**480**	<250 CR	<250 CR	<250	<250	<250	---	---	---	---	---	---	---	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<300	<300	<300	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-13	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Dec-13	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Mar-14	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	10-Jun-14	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Sep-14	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Sep-15	Well Not Sampled - Dry																						
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Mar-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	Well Not Found - Dry																						---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7S		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	Well Not Sampled - Dry																						
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Oct-11	<250	<250	**460**	<250	---	<250	<250	---	<250	**460**	---	**460**	**420**	---	**420**	<100	<100	<0.50	<0.50	<0.50	**0.90**	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-11	<290	<290	<290	<290	---	<290	---	---	---	<290	---	<290	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Mar-12	<330	<330	<330	<330	---	<330	<330	---	<330	<330	---	<330	<330	---	<330	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	12-Dec-12	**550**	<260 CR	<280 CR	**550**	<260 CR	<260 CR	**450**	<250 CR	<250 CR	**580**	<280 CR	<280 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-13	<500	<500	<250 CR	<500	<500	<500	<630	<630	<630	**390**	<250 CR	<250 CR	<2,300	<2,300	<2,300	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	**260**	---	**260**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	18-Jun-13	**610**	<300 CR	<320 CR	**610**	<300 CR	<300 CR	**530**	<260 CR	<260 CR	**640**	<320 CR	<320 CR	**480**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	19-Sep-13	**260**	<250 CR	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Dec-13	**660**	<310 CR	<330 CR	**660**	<310 CR	<310 CR	**590**	<260 CR	<260 CR	**730**	<330 CR	<330 CR	**540**	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7I		Porewater EAZ	P2.5-7	ALS	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	**770**	<370 CR	<380 CR	**770**	<370 CR	<370 CR	**700**	<350 CR	<350 CR	**760**	<380 CR	<380 CR	**650**	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Jun-13	**440**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**590**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	**290**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	**480**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P2.5-7D		Porewater	P2.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Dec-11	**310**	**310**	<250	**310**	---	**310**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.62**	<0.50	<0.50	**4.18**	**9.41**	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Jan-12	**560**	**560**	**590**	**560**	---	**560**	**500**	---	**500**	**590**	---	**590**	**580**	---	**580**	<100	<100	**7.51**	**0.77**	<0.50	**12.8**	**13.7**	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.79**	<0.50	<0.50	**5.42**	**9.68**	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Apr-12	**620**	<250 CR	**1,190 CR**	**620**	<250 CR	<250 CR	<800	<800	<800	**1,610**	**1,190 CR**	**1,190 CR**	<900	<900	<900	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	**560**	<250 CR	<250 CR	**560**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.80	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	**790**	<350 CR	<370 CR	**790**	<350 CR	<350 CR	**740**	<370 CR	<370 CR	**790**	<370 CR	<370 CR	**740**	<370 CR	<370 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	**580**	<250 CR	<260 CR	**580**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**530**	<260 CR	<260 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	**830**	<320 CR	<340 CR	**830**	<320 CR	<320 CR	**610**	<290 CR	<290 CR	**750**	<340 CR	<340 CR	**570**	<280 CR	<280 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	7-Nov-12	**260**	**260**	**280**	**260**	**260**	**260**	<250	<250	<250	**280**	**280**	**280**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-12	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-13	**740**	<300 CR	**580 CR**	**740**	<300 CR	<300 CR	**500**	<250 CR	<250 CR	**1,060**	**580 CR**	**580 CR**	**500**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	**930**	<460 CR	<510 CR	**930**	<460 CR	<460 CR	**730**	<360 CR	<360 CR	**1,100**	<510 CR	<510 CR	**700**	<350 CR	<350 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3	+	Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	**580**	<250 CR	<250 CR	**580**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**670**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}$-$<C_{19})$ [1]	Revised EPH_w $(C_{10}$-$<C_{19})$ [1]	Final EPH_w $(C_{10}$-$<C_{19})$ [1,6]	$EPH_w(C_{10}$-$<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}$-$C_{32})$	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ [6]	$EPH_w(C_{19}$-$C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ (Silica gel)	VPH_w	VH_w $(C_6$-$C_{10})$	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P3-3-AG	+	Porewater EAZ	P3-3	Agat	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	<100	<100	200	<100	---	<100	---	---	---	200	---	200	---	---	---	---	---	---	---	---	---	---	---
P3-3-MA	+	Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Dec-13	630	<250 CR	440 CR	630	<250 CR	<250 CR	---	---	---	920	440 CR	440 CR	---	---	---	---	---	---	---	---	---	---	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3	+	Porewater EAZ	P3-3	ALS	BC	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	---	---	---	<250	---	<250	---	---	---	390	---	390	---	---	---	---	---	---	---	---	---	---	---
P3-3-AG	+	Porewater EAZ	P3-3	Agat	BC	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	120	120	320	120	---	120	---	---	---	320	---	320	---	---	---	---	---	---	---	---	---	---	---
P3-3-MA	+	Porewater EAZ	P3-3	Maxxam	BC	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	<200	<200	480	<200 UJ	---	<200 UJ	---	---	---	480 J	---	480 J	---	---	---	---	---	---	---	---	---	---	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Jun-14	<250	<250	530	<250	---	<250	<250	---	<250	530	---	530	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-14	<250	<250	480	<250	---	<250	<250	---	<250	480	---	480	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-B		Porewater EAZ	P3-3	ALS	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	<250	<250	380	<250	---	<250	<250	---	<250	380	---	380	<250	---	<250	---	---	---	---	---	---	---	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3		Porewater EAZ	P3-3	ALS	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	370	<250 CR	<250 CR	370	<250 CR	<250 CR	300	<250 CR	<250 CR	480	<250 CR	<250 CR	360	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	2-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Apr-12	430	<250 CR	1,090 CR	430	<250 CR	<250 CR	<250	<250	<250	1,360	1,090 CR	1,090 CR	350	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-May-12	720	<330 CR	<330 CR	720	<330 CR	<330 CR	520	<250 CR	<250 CR	660	<330 CR	<330 CR	530	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	450 J	<250 CR	<250 CR	450 J	<250 CR	<250 CR	280 J	<250 CR	<250 CR	440 J	<250 CR	<250 CR	300 J	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	3-Aug-12	380	<250 CR	<250 CR	380	<250 CR	<250 CR	260	<250 CR	<250 CR	330	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	340	<250 CR	<250 CR	340	<250 CR	<250 CR	<250	<250	<250	290	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Oct-12	510	<250 CR	<250 CR	510	<250 CR	<250 CR	440	<250 CR	<250 CR	480	<250 CR	<250 CR	380	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	420	<250 CR	<250 CR	420	<250 CR	<250 CR	330	<250 CR	<250 CR	360	<250 CR	<250 CR	290	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	390	<250 CR	<250 CR	390	<250 CR	<250 CR	260	<250 CR	<250 CR	330	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-13	340	<250 CR	<250 CR	340	<250 CR	<250 CR	280	<250 CR	<250 CR	340	<250 CR	<250 CR	280	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D-A	@	Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	460	<250 CR	<250 CR	460	<250 CR	<250 CR	390	<250 CR	<250 CR	440	<250 CR	<250 CR	330	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	340	<250 CR	<250 CR	340	<250 CR	<250 CR	270	<250 CR	<250 CR	320	<250 CR	<250 CR	260	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	940	<470 CR	<500 CR	940	<470 CR	<470 CR	700	<350 CR	<350 CR	1,080	<500 CR	<500 CR	750	<380 CR	<380 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	<250	<250	280	<250	---	<250	<250	---	<250	280	---	280	260	---	260	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	---	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	Well Not Sampled - Not Found																						---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-7D		Porewater	P3-7	ALS	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	Well Not Sampled - Not Found																						---
P3R-7S		Porewater EAZ	P3R-7	ALS	---	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	12-Sep-12	Well Destroyed																						
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.60	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	2-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-May-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jul-12	<250	<250	260	<250	---	<250	<250	---	<250	260	---	260	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	3-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Jun-13	1,030	650 CR	<300 CR	1,030	650 CR	650 CR	340	<250 CR	<250 CR	680	<300 CR	<300 CR	300	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	17-Sep-13	520	<260 CR	<280 CR	520	<260 CR	<260 CR	360	<250 CR	<250 CR	670	<280 CR	<280 CR	310	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Dec-13	700	<340 CR	<360 CR	700	<340 CR	<340 CR	510	<250 CR	<250 CR	1,010	<360 CR	<360 CR	540	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Mar-14	<250	<250	870	<250	---	<250	<250	---	<250	870	---	870	260	---	260	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	10-Jun-14	<250	<250	270	<250	---	<250	<250	---	<250	270	---	270	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7I		Porewater	P3R-7	ALS	---	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	1-Dec-14	Well Destroyed																						
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.70	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	2-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<400	<400	<400	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Mar-16	Well Not Sampled - Not Found																						---
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-May-16	Well Not Sampled - Not Found																						---
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Aug-16	Well Not Sampled - Not Found																						---
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	22-Nov-16	Well Not Sampled - Not Found																						
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	13-Mar-17	Well Not Sampled - Not Found																						
P3R-7D		Porewater	P3R-7	ALS	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jun-17	Well Not Sampled - Not Found																						
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	7-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	Well Not Sampled - Dry																						
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	310	<250 CR	<250 CR	310	<250 CR	<250 CR	<250	<250	<250	310	<250 CR	<250 CR	<250	<250	<250	---	---	---	---	---	---	---	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-13	470	<250 CR	<250 CR	470	<250 CR	<250 CR	400	<250 CR	<250 CR	500	<250 CR	<250 CR	390	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P3-12S		Porewater EAZ	P3-12	ALS	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	Well Not Sampled - Insufficient Water for Analysis																						
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Dec-13	**530**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**600**	<250 CR	<250 CR	**540**	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	10-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P3-12S		Porewater EAZ	P3-12	ALS	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	4-Dec-14	Incomplete Analysis - Insufficient water in well															<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-15	Incomplete Analysis - Insufficient water in well															<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Aug-16	---	---	---	<250	---	---	---	---	---	<250	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	25-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12S		Porewater EAZ	P3-12	ALS	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Oct-11	**270**	**270**	**920**	**270**	---	**270**	<250	---	<250	**920**	---	**920**	**670**	---	**670**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	6-Jun-12	**490**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	18-Jun-13	**560**	<280 CR	<330 CR	**560**	<280 CR	<280 CR	**490**	<250 CR	<250 CR	**700**	<330 CR	<330 CR	**440**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-Sep-13	**330**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	12-Dec-13	**400**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Jun-14	<350	<350	<350	<350	---	<350	<350	---	<350	<350	---	<350	<350	---	<350	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	25-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12D		Porewater	P3-12	ALS	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7S		Porewater EAZ	P3.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	6-Oct-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7S		Porewater EAZ	P3.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7S		Porewater EAZ	P3.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7S		Porewater EAZ	P3.5-7	ALS	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7S-R		Porewater EAZ	P3.5-7R	ALS	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Sep-12	Well Destroyed																						
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	**280**	---	**280**	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	**580**	<250 CR	<250 CR	**580**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**620**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Dec-12	**950**	<330 CR	<350 CR	**950**	<330 CR	<330 CR	**530**	<260 CR	<260 CR	**990**	<350 CR	<350 CR	**560**	<280 CR	<280 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	**1,340**	**590 CR**	<400 CR	**1,340**	**590 CR**	**590 CR**	**370**	<250 CR	<250 CR	**840**	<400 CR	<400 CR	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	**1,030**	<400 CR	<700 CR	**1,030**	<400 CR	<400 CR	**590**	<260 CR	<260 CR	**1,380**	<700 CR	<700 CR	**640**	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-May-13	**830**	<330 CR	<350 CR	**830**	<330 CR	<330 CR	**640**	<270 CR	<270 CR	**850**	<350 CR	<350 CR	**440**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-13	**540**	<250 CR	<250 CR	**540**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**570**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	**810**	<390 CR	<420 CR	**810**	<390 CR	<390 CR	**540**	<270 CR	<270 CR	**920**	<420 CR	<420 CR	**510**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I	+	Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	**460**	<250 CR	<250 CR	**460**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**580**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P3.5-7I-AG	+	Porewater	P3.5-7	Agat	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I-MA	+	Groundwater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I	+	Porewater	P3.5-7	ALS	BC	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I-AG	+	Porewater	P3.5-7	Agat	BC	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	**289**	**289**	**690**	**290**	---	**290**	---	---	---	**690**	---	**690**	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I-MA	+	Porewater	P3.5-7	Maxxam	BC	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	**260**	**260**	**560**	**260 J**	---	**260 J**	---	---	---	**560 J**	---	**560 J**	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	4-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7I		Porewater	P3.5-7	ALS	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Oct-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12	<250 UJ	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Jun-13	**480**	<250 CR	<260 CR	**480**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**520**	<260 CR	<260 CR	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	17-Sep-13	**320**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<250	<250	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Dec-13	**340**	<250 CR	**290 CR**	**340**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**570**	**290 CR**	**290 CR**	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-7D		Porewater	P3.5-7	ALS	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	**760**	<380 CR	<390 CR	**760**	<380 CR	<380 CR	**660**	<330 CR	<330 CR	**780**	<390 CR	<390 CR	**690**	<340 CR	<340 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	**530**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**620**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

Parkland Refining (B.C.) Ltd.
\\cabny1fp001\prod\1686\Projects\URS-CHEVRON\60601814 2019 Foreshore Monitoring\500-Deliverables\501 Annual Report\Draft Report\Appendices\Appendix A (needs master table for USB)\
20200214_PreFPTS_Tables A1 to A3_pre 2016 dat

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}$-$<C_{19})$ [1]	Revised EPH_w $(C_{10}$-$<C_{19})$ [1]	Final EPH_w $(C_{10}$-$<C_{19})$ [1,6]	$EPH_w(C_{10}$-$<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}$-$C_{32})$	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ [6]	$EPH_w(C_{19}$-$C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ (Silica gel)	VPH_w	VH_w $(C_6$-$C_{10})$	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	25-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12S		Porewater EAZ	P3.5-12	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	27-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Dec-13	**410**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**580**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	25-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12I		Porewater	P3.5-12	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	27-Mar-13	**690**	<350 CR	<330 CR	**690**	<350 CR	<350 CR	**610**	<300 CR	<300 CR	**660**	<330 CR	<330 CR	**570**	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	**370**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D	+	Porewater	P3.5-12	ALS	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3.5-12D-AG	+	Porewater	P3.5-12	Agat	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P3.5-12D-MA	+	Porewater	P3.5-12	Maxxam	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	25-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.5-12D		Porewater	P3.5-12	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	15-Mar-13	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	**290**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	20-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13	**320 J**	<250 CR	<250 CR	**320 J**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Sep-13	**320**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<250	<250	<250	**330**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	12-Dec-13	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3S		Porewater EAZ	P3.8-3	ALS	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	**380**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I	+	Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	**490**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**550**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I-AG	+	Porewater	P3.8-3	Agat	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P3.8-3I-MA	+	Porewater	P3.8-3	Maxxam	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I	+	Porewater	P3.8-3	ALS	BC	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3.8-3I-AG	+	Porewater	P3.8-3	Agat	BC	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<100	<100	**110**	<100	---	<100	---	---	---	**110**	---	**110**	---	---	---	---	---	---	---	---	---	---	---
P3.8-3I-MA	+	Porewater	P3.8-3	Maxxam	BC	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<200	<200	<200	<200 UJ	---	<200 UJ	---	---	---	<200 UJ	---	<200 UJ	---	---	---	---	---	---	---	---	---	---	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	**0.92**	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3I		Porewater	P3.8-3	ALS	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**280**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	**280 J**	<250 CR	<250 CR	**280 J**	<250 CR	<250 CR	<250 UJ	<250	<250	**300**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C$_{10}$-<C$_{19}$) [1]	Revised EPH$_w$ (C$_{10}$-<C$_{19}$) [1]	Final EPH$_w$ (C$_{10}$-<C$_{19}$) [1,6]	EPH$_w$(C$_{10}$-<C$_{19}$) [1] (Silica gel)	Revised EPH$_w$ (C$_{10}$-<C$_{19}$) [1] (Silica gel)	Final EPH$_w$ (C$_{10}$-<C$_{19}$) [1] (Silica gel)	EPH$_w$(C$_{19}$-C$_{32}$)	Revised EPH$_w$ (C$_{19}$-C$_{32}$)	Final EPH$_w$ (C$_{19}$-C$_{32}$) [6]	EPH$_w$(C$_{19}$-C$_{32}$) (Silica gel)	Revised EPH$_w$ (C$_{19}$-C$_{32}$)	Final EPH$_w$ (C$_{19}$-C$_{32}$) (Silica gel)	VPH$_w$	VH$_w$ (C$_6$-C$_{10}$)	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3.8-3D		Porewater	P3.8-3	ALS	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
Eastern IRA Barrier																																				
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Mar-13	**280**	<250 CR	<250	**280**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	20-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	**260**	<250 CR	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Dec-13	**420**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S	+	Porewater EAZ	P4.2-3	ALS	BC	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P4.2-3S-AG	+	Porewater EAZ	P4.2-3	Agat	BC	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P4.2-3S-MA	+	Porewater EAZ	P4.2-3	Maxxam	BC	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.66**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3S		Porewater EAZ	P4.2-3	ALS	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Mar-16	Well Destroyed																						
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Dec-13	**250**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.60**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.85**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.45**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.88**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**2.58**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**3.60**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3I)		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3I)		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	22-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	28-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	4-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3I		Porewater	P4.2-3	ALS	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.99**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.89**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.73**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.52**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**2.36**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	10-Mar-15	Well infilled with sand and gravel																						---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**4.4**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**41.1**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**35.2**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**89**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**59.6**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5	Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**87**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**37%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**43.9**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5	Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**39.2**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**11%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Feb-17	Well not sampled - cap off																						---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**61.9**	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**72.6**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**16%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**41.9**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**43.8**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**4%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	28-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**40.0**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	28-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**38.7**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**40.2**	<0.50	<0.50	<0.50	<0.75	---
P4.2-3D-A		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	170	**143**	**0.52**	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D-A)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	170	**135**	**0.56**	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**6%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**68**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**66.8**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**2%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**68**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P4.2-3D)		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**68.7**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1%**	---	---	---	---	---
P4.2-3D		Porewater	P4.2-3	ALS	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**57.4**	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-11	<330	<330	<330	<330	---	<330	<330	---	<330	<330	---	<330	<330	---	<330	---	---	---	---	---	---	---	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**320**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	**0.87**	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-12	**1,410**	<520 CR	**690 CR**	**1,410**	<520 CR	<520 CR	**1,010**	<440 CR	<440 CR	**1,800**	**690 CR**	**690 CR**	**1,350**	<470 CR	<470 CR	<100	<100	<0.50	<0.50	<0.50	**8.63**	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jun-12	<250	<250	**2,040**	<250 UJ	<250	<250 UJ	<250	<250	<250	**2,040 J**	**2,040**	**2,040 J**	**260**	**260**	**260**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	<250	<250	**350**	<250	<250	<250	<250	<250	<250	**350**	**350**	**350**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	**880**	<420 CR	<450 CR	**880**	<420 CR	<420 CR	**630**	<320 CR	<320 CR	**1,040**	<450 CR	<450 CR	**830**	<350 CR	<350 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	**520**	<260 CR	<250 CR	**520**	<260 CR	<260 CR	**640**	<260 CR	<260 CR	**480**	<250 CR	<250 CR	**520**	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	**430**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Nov-12	**770**	<390 CR	<360 CR	**770**	<390 CR	<390 CR	**630**	<320 CR	<320 CR	**720**	<360 CR	<360 CR	**520**	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Dec-12	**390**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	<250	<250	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**360**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-13	**670**	<350 CR	<550 CR	<700	<350 CR	<350 CR	<1,300	<1,300	<1,300	**1,030**	<550 CR	<550 CR	<2,800	<2,800	<2,800	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-13	**1,240**	<510 CR	<540 CR	**1,240**	<510 CR	<510 CR	**990**	<380 CR	<380 CR	**1,330**	<540 CR	<540 CR	**770**	<390 CR	<390 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Jun-13	**680**	<300 CR	<320 CR	**680**	<300 CR	<300 CR	**570**	<290 CR	<290 CR	**740**	<320 CR	<320 CR	**490**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Sep-13	**640**	<320 CR	<330 CR	**640**	<320 CR	<320 CR	**460**	<250 CR	<250 CR	**660**	<330 CR	<330 CR	**390**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	**320**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Dec-14	<250	<250	**260**	<250	---	<250	<250	---	<250	**260**	---	**260**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Aug-16	---	---	---	<250	---	---	---	---	---	520	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Aug-16	<250	<250	520	<250	---	<250	---	---	---	520	---	520	---	---	---	---	---	---	---	---	---	---	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	21-Nov-16	<250	<250	310	<250	---	<250	---	---	---	310	---	310	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Dec-16	<350	<350	<350	<350	---	<350	---	---	---	<350	---	<350	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Feb-17	<250	<250	280	<250	---	<250	---	---	---	280	---	280	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8S		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-11	<300	<300	<300	<300	---	<300	<290	---	<290	<300	---	<300	<290	---	<290	---	---	---	---	---	---	---	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Apr-12	630	<250 CR	<250 CR	630	<250 CR	<250 CR	360	<250 CR	<250 CR	690	<250 CR	<250 CR	410	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	1,060	<420 CR	1,000 CR	1,060	<420 CR	<420 CR	620	<270 CR	<270 CR	1,890	1,000 CR	1,000 CR	660	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	350	<250 CR	260 CR	350	<250 CR	<250 CR	<250	<250	<250	530	260 CR	260 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	580	<290 CR	<280 CR	580	<290 CR	<290 CR	490	<250 CR	<250 CR	550	<280 CR	<280 CR	460	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	590	<300 CR	<330 CR	590	<300 CR	<300 CR	500	<250 CR	<250 CR	700	<330 CR	<330 CR	500	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	370	<250 CR	<250 CR	370	<250 CR	<250 CR	270	<250 CR	<250 CR	370	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	380	<250 CR	<250 CR	380	<250 CR	<250 CR	260	<250 CR	<250 CR	410	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	520	<260 CR	<250 CR	520	<260 CR	<260 CR	300	<250 CR	<250 CR	470	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-13	400	<250 CR	<250 CR	400	<250 CR	<250 CR	290	<250 CR	<250 CR	470	<250 CR	<250 CR	300	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Jun-13	420	<250 CR	<250 CR	420	<250 CR	<250 CR	370	<250 CR	<250 CR	490	<250 CR	<250 CR	350	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	370	<250 CR	<250 CR	370	<250 CR	<250 CR	270	<250 CR	<250 CR	400	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	610	<250 CR	300 CR	610	<250 CR	<250 CR	380	<250 CR	<250 CR	750	300 CR	300 CR	430	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	<250	<250	270	<250	---	<250	<250	---	<250	270	---	270	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	<250	<250	340	<250	---	<250	---	---	---	340	---	340	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8I		Porewater EAZ	P4.8-8	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	---	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	Well Not Sampled - Insufficient Water for Analysis																						
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Apr-12	320	<250 CR	<250 CR	320	<250 CR	<250 CR	<250	<250	<250	320	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	660	<300 CR	<320 CR	660	<300 CR	<300 CR	600	<300 CR	<300 CR	750	<320 CR	<320 CR	640	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	1,080	<410 CR	570 CR	1,080	<410 CR	<410 CR	590	<290 CR	<290 CR	1,440	570 CR	570 CR	680	<310 CR	<310 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	260	<250 CR	260 CR	260	<250 CR	<250 CR	<250	<250	<250	430	260 CR	260 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Sep-12	670	<340 CR	<300 CR	670	<340 CR	<340 CR	<250	<250	<250	610	<300 CR	<300 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	620	<300 CR	<320 CR	620	<300 CR	<300 CR	420	<250 CR	<250 CR	630	<320 CR	<320 CR	410	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	290	<250 CR	<250 CR	290	<250 CR	<250 CR	<250	<250	<250	300	<250 CR	<250 CR	290	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	700	<350 CR	<360 CR	700	<350 CR	<350 CR	520	<260 CR	<260 CR	710	<360 CR	<360 CR	520	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Mar-13	440	<250 CR	290 CR	440	<250 CR	<250 CR	430	<250 CR	<250 CR	670	290 CR	290 CR	410	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-13	260	<250 CR	<250	260	<250 CR	<250 CR	260	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D-F	F	Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-13	660	<250 CR	<270 CR	660	<250 CR	<250 CR	430	<250 CR	<250 CR	580	<270 CR	<270 CR	280	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-13	710	<350 CR	<390 CR	710	<350 CR	<350 CR	500	<250 CR	<250 CR	770	<390 CR	<390 CR	460	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	310	<250 CR	<250 CR	310	<250 CR	<250 CR	<250	<250	<250	420	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D-F	F	Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	330	<250 CR	<250 CR	330	<250 CR	<250 CR	<250	<250	<250	430	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	1.61	<0.75	---
P4.8-8D	+	Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	660	<260 CR	<280 CR	660	<260 CR	<260 CR	470	<250 CR	<250 CR	770	<280 CR	<280 CR	510	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D-AG	+	Porewater	P4.8-8	Agat	DCM	CS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D-MA	+	Porewater	P4.8-8	Maxxam	DCM	CS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D	+	Porewater	P4.8-8	ALS	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D-AG	+	Porewater	P4.8-8	Agat	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D-MA	+	Porewater	P4.8-8	Maxxam	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<200	<200	220	<200	---	<200	---	---	---	220	---	220	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-Apr-17	Well Not Sampled - Dry																						
P4.8-8D		Porewater	P4.8-8	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	510	310 CR	650 CR	510	310 CR	310 CR	270	<250 CR	<250 CR	860	650 CR	650 CR	290	<250 CR	<250 CR	110	110	<0.50	<0.50	<0.50	<1.1	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-12	890	<300 CR	550 CR	890	<300 CR	<300 CR	610	<260 CR	<260 CR	1,190	550 CR	550 CR	590	<280 CR	<280 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Well Not Sampled																						
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13	390	<250 CR	450 CR	390	<250 CR	<250 CR	260	<250 CR	<250 CR	800	450 CR	450 CR	280	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	260	<250 CR	<250 CR	270	<250 CR	<250 CR	<250	<250	<250	270	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	350	<250 CR	<250 CR	350	<250 CR	<250 CR	320	<250 CR	<250 CR	450	<250 CR	<250 CR	270	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	620	<250 CR	<260 CR	620	<250 CR	<250 CR	470	<250 CR	<250 CR	680	<260 CR	<260 CR	480	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5		Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}$-$<C_{19})$ [1]	Revised EPH_w $(C_{10}$-$<C_{19})$ [1]	Final EPH_w $(C_{10}$-$<C_{19})$ [1,6]	$EPH_w(C_{10}$-$<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}$-$<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}$-$C_{32})$	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ [6]	$EPH_w(C_{19}$-$C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}$-$C_{32})$	Final EPH_w $(C_{19}$-$C_{32})$ (Silica gel)	VPH_w	VH_w $(C_6$-$C_{10})$	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]													250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source													DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]													300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P4.9-5	Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-5	Porewater EAZ	P4.9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	740	<370 CR	<360 CR	740	<370 CR	<370 CR	580	<290 CR	<290 CR	710	<360 CR	<360 CR	580	<290 CR	<290 CR	<100	<100	0.85	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Jun-13	430	<250 CR	<250 CR	430	<250 CR	<250 CR	350	<250 CR	<250 CR	450	<250 CR	<250 CR	320	<250 CR	<250 CR	<100	<100	0.96	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	280	<250 CR	<250 CR	<250	<250	<250	<100	<100	2.13	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Dec-13	490	<250 CR	<250 CR	490	<250 CR	<250 CR	380	<250 CR	<250 CR	490	<250 CR	<250 CR	380	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	2-Dec-14	280	280	660	280	---	280	<250	---	<250	660	---	660	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P4.9-12S)	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1	Weathered Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12S	Porewater EAZ	P4.9-12	ALS	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	11.4	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	5.86	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.57	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.72	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.40	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.12	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	3.68	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.97	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.59	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.65	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.54	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.55	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12I	Porewater	P4.9-12	ALS	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	27-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	5.07	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	12.8	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	20.9	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.65	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	12.1	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	16.1	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	23.7	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.81	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	15.5	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P4.9-12D)	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	15.8	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	---	---	---	---	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	9.90	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.57	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	11.7	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.40	<0.50	<0.50	0.87	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.91	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.59	<0.50	<0.50	<0.50	<0.75	---
P4.9-12D	Porewater	P4.9-12	ALS	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	6.82	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	0.91	1.09	<0.50	0.73	12.2	---
P5-3S	Porewater EAZ	P5-3	ALS	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Nov-11	Well Not Sampled																						
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	220	19.9	0.53	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Dec-11	370	370	<250	370	---	370	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	<250	<250	280	<250	<250	<250	<250	<250	<250	280	280	280	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-12	360	<250 CR	<250 CR	360	<250 CR	<250 CR	380	<250 CR	<250 CR	320	<250 CR	<250 CR	360	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.70	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.55	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jul-12	790	<360 CR	<380 CR	790	<360 CR	<360 CR	670	<330 CR	<330 CR	810	<380 CR	<380 CR	630	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	860	<410 CR	<440 CR	860	<410 CR	<410 CR	570	<280 CR	<280 CR	950	<440 CR	<440 CR	590	<300 CR	<300 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	Well Not Sampled - Insufficient Water for Analysis																						
P5-3S	Porewater EAZ	P5-3	ALS	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	Well Not Sampled - Dry																						
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.73	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	25-Feb-13	Well Not Sampled																						
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<1,000	<1,000	<1,000	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	380	<250 CR	<250 CR	380	<250 CR	<250 CR	280	<250 CR	<250 CR	390	<250 CR	<250 CR	360	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3S	Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11	620	620	990	620	---	620	760	---	760	990	---	990	1,320	---	1,320	<100	<100	<0.50	0.86	<0.50	<0.50	9.43	---
P5-3I	Porewater EAZ	P5-3	ALS	---	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Oct-11	Well Not Sampled																						
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	0.81	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Dec-11	390	390	510	390	---	390	---	---	---	510	---	510	---	---	---	---	---	---	---	---	---	---	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	0.96	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	290	<250 CR	680 CR	290	<250 CR	<250 CR	<250	<250	<250	810	680 CR	680 CR	<250	<250	<250	<100	<100	1.63	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.75	<0.50	<0.50	<0.80	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.62	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jul-12	600	<300 CR	<250 CR	600	<300 CR	<300 CR	310	<250 CR	<250 CR	510	<250 CR	<250 CR	320	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I	Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	520	<250 CR	<250 CR	530	<250 CR	<250 CR	390	<250 CR	<250 CR	480	<250 CR	<250 CR	340	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	0.93	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	**290**	**290**	<250	**290**	**290**	**290**	<250	<250	<250	<250	<250	<250	<250	<250	<250	**130**	**140**	**3.05**	**1.17**	<0.50	<0.50	**3.24 UJ**	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12	**260**	<250 CR	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.23**	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**3.69**	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	**350**	<250 CR	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<1,100	<1,100	<1,100	<100	<100	**4.96**	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	**110**	**110**	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	**870**	<450 CR	<350 CR	**870**	<450 CR	<450 CR	**520**	<250 CR	<250 CR	**810**	<350 CR	<350 CR	**550**	<250 CR	<250 CR	<100	<100	**0.63**	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	**250**	**250**	<250	**250**	---	**250**	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P5-3I	+	Porewater EAZ	P5-3	ALS	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	---	---	---	**560**	---	**560**	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-3I-AG	+	Porewater EAZ	P5-3	Agat	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	**210**	**210**	<100	**210**	---	**210**	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P5-3I-MA	+	Porewater EAZ	P5-3	Maxxam	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	**810**	**810**	**400**	**810**	---	**810**	---	---	---	**400**	---	**400**	---	---	---	---	---	---	---	---	---	---	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	**300**	**300**	**380**	**300**	---	**300**	<250	---	<250	**380**	---	**380**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Dec-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3I		Porewater EAZ	P5-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	28-Sep-11	**740**	**740**	**1,330**	**740**	---	**740**	**430**	---	**430**	**1,330**	---	**1,330**	**810**	---	**810**	<100	<100	<0.50	<0.50	<0.50	<0.50	**1.86**	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Dec-11	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	---	---	---	<250 UJ	---	<250 UJ	---	---	---	<100 UJ	<100 UJ	**0.50 J**	<0.50 UJ	<0.50 UJ	<0.50 UJ	<0.75 UJ	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	26-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	**400**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.90	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jul-12	**680**	<290 CR	**500 CR**	**680**	<290 CR	<290 CR	**560**	<250 CR	<250 CR	**1,120**	**500 CR**	**500 CR**	**450**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-12	**440**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	**860**	<430 CR	<410 CR	**860**	<430 CR	<430 CR	**680**	<340 CR	<340 CR	**820**	<410 CR	<410 CR	**600**	<300 CR	<300 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-12	**260**	<250 CR	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.65**	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	25-Feb-13	Well Not Sampled																						
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**5.65**	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	**810**	<350 CR	**310 CR**	**810**	<350 CR	<350 CR	**480**	<250 CR	<250 CR	**820**	**310 CR**	**310 CR**	**470**	<250 CR	<250 CR	**100**	**100**	**1.06**	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D		Porewater	P5-3	ALS	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Mar-16	Well Not Sampled - Infilled																						---
P5-3D		Porewater	P5-3	ALS	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-May-16	Well Destroyed																						---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Dec-11	**390**	<250 CR	<300 CR	**390**	<250 CR	<250 CR	<250	<250	<250	**440**	<300 CR	<300 CR	**260**	<250 CR	<250 CR	<100	<100	**2.31**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.27**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	**0.70**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Feb-12	**260**	<250 CR	**760 CR**	**260**	<250 CR	<250 CR	<250	<250	<250	**840**	**760 CR**	**760 CR**	**340**	**260 CR**	**260 CR**	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.49**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Apr-12	**840**	<300 CR	<320 CR	**840**	<300 CR	<300 CR	**500**	<250 CR	<250 CR	**770**	<320 CR	<320 CR	**480**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	**0.58**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	**1,200**	<470 CR	**1,550 CR**	**1,200**	<470 CR	<470 CR	**870**	<420 CR	<420 CR	**2,560**	**1,550 CR**	**1,550 CR**	**880**	<440 CR	<440 CR	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	**280**	<250 CR	**530 CR**	**280**	<250 CR	<250 CR	<250	<250	<250	**560**	**530 CR**	**530 CR**	**360**	**330 CR**	**330 CR**	<100	<100	**1.38**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	**1,360**	<560 CR	<600 CR	**1,360**	<560 CR	<560 CR	**1,000**	<450 CR	<450 CR	**1,630**	<600 CR	<600 CR	**1,160**	<480 CR	<480 CR	<100	<100	**1.96**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	**560**	<250 CR	<250 CR	**560**	<250 CR	<250 CR	**630**	<250 CR	<250 CR	**620**	<250 CR	<250 CR	**600**	<250 CR	<250 CR	<100	<100	**2.09**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	**560**	<280 CR	<280 CR	**560**	<280 CR	<280 CR	**440**	<250 CR	<250 CR	**580**	<280 CR	<280 CR	**430**	<250 CR	<250 CR	<100	<100	**0.69**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	**1.48**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Nov-12	**1,010**	<420 CR	**630 CR**	**1,010**	<420 CR	<420 CR	**770**	<360 CR	<360 CR	**1,530**	**630 CR**	**630 CR**	**1,120**	<380 CR	<380 CR	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Dec-12	<260	<260	<260	<260	<260	<260	<250	<250	<250	<260	<260	<260	<250	<250	<250	<100	<100	**3.40**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	<430	<430	**640**	<430	<430	<430	<430	<430	<430	**640**	**640**	**640**	<430	<430	<430	<100	<100	**1.68**	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	**420**	<250 CR	<300 CR	**420**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**580**	<300 CR	<300 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Jun-13	**660**	<290 CR	<350 CR	**660**	<290 CR	<290 CR	**520**	<260 CR	<260 CR	**920**	<350 CR	<350 CR	**600**	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Sep-13	**380**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	**1,150**	<500 CR	<530 CR	**1,150**	<500 CR	<500 CR	**1,210**	<550 CR	<550 CR	**1,450**	<530 CR	<530 CR	**1,350**	<590 CR	<590 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Mar-14	<250	<250	**430**	<250	---	<250	<250	---	<250	**430**	---	**430**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14	<250	<250	**280**	<250	---	<250	<250	---	<250	**280**	---	**280**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Dec-14	**300**	**300**	**1,220**	**300**	---	**300**	<250	---	<250	**1,220**	---	**1,220**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7S		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**4.96**	<0.50	<0.50	**0.53**	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**7.58**	<0.50	<0.50	**0.54**	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	**0.77**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.83**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-May-12	<250	<250	**360**	<250	---	<250	<250	---	<250	**360**	---	**360**	<250	---	<250	<100	<100	**29.2**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	**1,080**	<400 CR	**1,640 CR**	**1,080**	<400 CR	<400 CR	**580**	<270 CR	<270 CR	**2,490**	**1,640 CR**	**1,640 CR**	**610**	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	**270**	<250 CR	**330 CR**	**270**	<250 CR	<250 CR	<250	<250	<250	**400**	**330 CR**	**330 CR**	<250	<250	<250	<100	<100	**47.8**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	**940**	<380 CR	<410 CR	**940**	<380 CR	<380 CR	**910**	<450 CR	<450 CR	**930**	<410 CR	<410 CR	**820**	<410 CR	<410 CR	<100	<100	**4.04**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	**280**	**280**	<270	**280**	**280**	**280**	<250	<250	<250	<270	<270	<270	<250	<250	<250	<100	<100	**31.9**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	**640**	<260 CR	<280 CR	**640**	<260 CR	<260 CR	**450**	<250 CR	<250 CR	**550**	<280 CR	<280 CR	**390**	<250 CR	<250 CR	<100	<100	**6.91**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	**420**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<100	<100	**17.6**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**22.6**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**12.5**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	**640**	<300 CR	<310 CR	**640**	<300 CR	<300 CR	**470**	<250 CR	<250 CR	**790**	<310 CR	<310 CR	**370**	<250 CR	<250 CR	<100	<100	**7.62**	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.39**	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	400	<250 CR	<250 CR	400	<250 CR	<250 CR	270	<250 CR	<250 CR	410	<250 CR	<250 CR	<250	<250	<250	<100	<100	1.75	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	650	<250 CR	<250 CR	650	<250 CR	<250 CR	420	<250 CR	<250 CR	640	<250 CR	<250 CR	450	<250 CR	<250 CR	<100	<100	1.83	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Mar-14	<250	<250	310	<250	---	<250	<250	---	<250	310	---	310	<250	---	<250	<100	<100	1.18	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.24	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7I		Porewater EAZ	P5-7	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.87	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.72	<0.50	<0.50	0.55	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	<250	<250	630	<250	<250	<250	<250	<250	<250	630	630	630	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.16	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	970	<390 CR	810 CR	970	<390 CR	<390 CR	610	<280 CR	<280 CR	1,630	810 CR	810 CR	600	<300 CR	<300 CR	<100	<100	1.94	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	280	280	<250	280	280	280	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.60	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Aug-12	420	<250 CR	<250 CR	420	<250 CR	<250 CR	480	<250 CR	<250 CR	390	<250 CR	<250 CR	420	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-12	740	<320 CR	<340 CR	740	<320 CR	<320 CR	510	<250 CR	<250 CR	710	<340 CR	<340 CR	560	<260 CR	<260 CR	<100	<100	2.88	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	580	<280 CR	<280 CR	580	<280 CR	<280 CR	450	<250 CR	<250 CR	560	<280 CR	<280 CR	430	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	350	<250 CR	<250 CR	350	<250 CR	<250 CR	300	<250 CR	<250 CR	250	<250 CR	<250 CR	<250	<250	<250	<100	<100	3.29	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	340	<250 CR	<250 CR	340	<250 CR	<250 CR	<250	<250	<250	280	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	560	<280 CR	<260 CR	560	<280 CR	<280 CR	340	<250 CR	<250 CR	510	<260 CR	<260 CR	320	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	520	<250 CR	<250 CR	520	<250 CR	<250 CR	370	<250 CR	<250 CR	480	<250 CR	<250 CR	320	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Jun-13	380	<250 CR	<250 CR	380	<250 CR	<250 CR	260	<250 CR	<250 CR	330	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	630	<310 CR	<330 CR	630	<310 CR	<310 CR	440	<250 CR	<250 CR	650	<330 CR	<330 CR	360	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D	+	Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	670	<270 CR	<280 CR	670	<270 CR	<270 CR	590	<270 CR	<270 CR	660	<280 CR	<280 CR	590	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D-AG	+	Porewater	P5-7	Agat	DCM	CS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P5-7D-MA	+	Groundwater	P5-7	Maxxam	DCM	CS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	0.68	<0.50	<0.50	<0.50	<0.75	---
P5-7D	+	Porewater	P5-7	ALS	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P5-7D-AG	+	Porewater	P5-7	Agat	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	110	110	180	110	---	110	---	---	---	180	---	180	---	---	---	---	---	---	---	---	---	---	---
P5-7D-MA	+	Porewater	P5-7	Maxxam	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	<200	<200	200	<200 UJ	---	<200 UJ	---	---	---	200 J	---	200 J	---	---	---	---	---	---	---	---	---	---	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.05	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-7D		Porewater	P5-7	ALS	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	2,180	1,820 CR	<250 CR	2,210	1,850 CR	1,850 CR	1,160	810 CR	810 CR	410	<250 CR	<250 CR	300	<250 CR	<250 CR	4,100	9,310	1,810	510	<2.5	499	2,420	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4,100	7,520	1,170	496	<2.5	219	1,580	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	14-Sep-12	1,060	1,060	<250	1,080	---	1,080	370	---	370	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	1,540	1,540	<250	1,580	1,580	1,580	770	770	770	<250	<250	<250	<250	<250	<250	5,400	9,100	1,230	537	<5.0	94.2	1,840	<5.0
P5.25-3		Porewater EAZ	P5.25-3	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	2,260	2,260	<250	2,330	2,330	2,330	1,060	1,060	1,060	<250	<250	<250	<250	<250	<250	3,800	10,600	1,510	797	<10	604	3,910	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	2,780	2,430 CR	<250 CR	2,830	2,490 CR	2,490 CR	1,130	820 CR	820 CR	370	<250 CR	<250 CR	<250	<250	<250	2,290	4,550	751	426	<2.5	20.2	1,060	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	3,390	2,790 CR	<320 CR	3,440	2,840 CR	2,840 CR	1,260	670 CR	670 CR	880	<320 CR	<320 CR	510	<260 CR	<260 CR	3,600	5,920	576	367	<2.5	100	1,270	---
P5.25-3	+	Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	3,000	2,690 CR	<250 CR	3,060	2,750 CR	2,750 CR	990	690 CR	690 CR	410	<250 CR	<250 CR	<250	<250	<250	3,720	6,160	598	404	<2.5	41.3	1,400	---
P5.25-3-AG	+	Porewater EAZ	P5.25-3	Agat	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	2,380	2,380	370	2,390	---	2,390	---	---	---	370	---	370	---	---	---	---	---	---	---	---	---	---	---
P5.25-3-MA	+	Porewater EAZ	P5.25-3	Maxxam	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	1,600	1,600	<200	1,700	---	1,700	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Dec-13	2,820	2,240 CR	<300 CR	2,870	2,280 CR	2,280 CR	---	---	---	610	<300 CR	<300 CR	---	---	---	---	---	---	---	---	---	---	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,930	1,930	<250	1,990	---	1,990	1,040	---	1,040	<250	---	<250	<250	---	<250	6,020	3,830	515	433	<2.5	32.8	1,200	---
P5.25-3	+	Porewater EAZ	P5.25-3	ALS	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	---	---	---	4,050	---	4,050	---	---	---	630	---	630	---	---	---	---	---	---	---	---	---	---	---
P5.25-3-AG	+	Porewater EAZ	P5.25-3	Agat	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,260	1,260	240	1,300	---	1,300	---	---	---	240	---	240	---	---	---	---	---	---	---	---	---	---	---
P5.25-3-MA	+	Porewater EAZ	P5.25-3	Maxxam	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	2,000	2,000	990	2,100 J	---	2,100 J	---	---	---	990 J	---	990 J	---	---	---	---	---	---	---	---	---	---	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	1,870	1,870	<250	1,920	---	1,920	560	---	560	<250	---	<250	<250	---	<250	3,100	4,960	588	373	<2.5	12.8	882	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	2,320	2,320	380	2,350	---	2,350	500	---	500	380	---	380	<250	---	<250	2,290	3,340	206	112	<2.5	25.3	703	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	2,640	2,640	510	2,680	---	2,680	590	---	590	510	---	510	350	---	350	2,500	3,530	225	202	<1.0	10.1	594	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	1,340	1,340	<250	1,370	---	1,370	760	---	760	<250	---	<250	<250	---	<250	2,540	3,470	273	141	<2.5	6.5	504	---
P5.25-3-B		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	1,280	1,280	<250	1,300	---	1,300	---	---	---	<250	---	<250	---	---	---	1,180	1,560	100	6.7	<1.0	5.3	260	---
DUP-8 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	1,120	1,120	<250	1,140	---	1,140	---	---	---	<250	---	<250	---	---	---	1,220	1,580	96.1	5.80	<0.50	4.99	251	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	1%	4%	14%	---	6%	4%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	1,390	1,390	<250	1,410	---	1,410	---	---	---	<250	---	<250	---	---	---	1,520	1,750	118	20.1	<1.0	7.2	77.2	---
DUP-8 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	1,430	1,430	<250	1,450	---	1,450	---	---	---	<250	---	<250	---	---	---	1,170	1,400	118	25.0	<0.50	7.00	85.1	---
QA/QC RPD													**Duplicates**	3%	3%	---	3%	---	3%	---	---	---	---	---	---	---	---	---	26%	22%	0%	22%	---	3%	10%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	1,310	1,310	<250	1,330	---	1,330	---	---	---	<250	---	<250	---	---	---	1,280	1,480	128	4.09	<0.50	1.76	73.0	---
DUP-7 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	1,140	1,140	<250	1,170	---	1,170	---	---	---	<250	---	<250	---	---	---	1,090	1,300	137	3.80	<0.50	1.68	62.5	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	16%	13%	7%	7%	---	---	15%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	1,320	1,320	810	1,360	---	1,360	---	---	---	810	---	810	---	---	---	2,380	3,270	167	186	<0.50	2.78	535	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	1,260	1,260	<250	1,280	---	1,280	---	---	---	<250	---	<250	---	---	---	2,440	2,800	133	110	<0.50	3.56	118	---
DUP-5 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	1,280	1,280	<250	1,300	---	1,300	---	---	---	<250	---	<250	---	---	---	1,870	2,240	137	110	<0.50	3.62	119	---
QA/QC RPD													**Duplicates**	2%	2%	---	2%	---	2%	---	---	---	---	---	---	---	---	---	26%	22%	3%	0%	---	2%	1%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	980	980	<250	990	---	990	---	---	---	<250	---	<250	---	---	---	1,650	2,130	128	47.4	<0.50	42.5	268	---
DUP-1 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	1,090	1,090	<250	1,100	---	1,100	---	---	---	<250	---	<250	---	---	---	1,350	1,850	132	47.4	<0.50	43.2	272	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	20%	14%	3%	0%	---	2%	1%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	1,120	1,120	<250	1,130	---	1,130	---	---	---	<250	---	<250	---	---	---	940	1,040	83.8	1.42	<0.50	0.88	8.24	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	880	880	<250	900	---	900	---	---	---	<250	---	<250	---	---	---	1,050	1,520	91.2	110	<0.50	1.38	261	---
DUP-4 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	820	820	<250	840	---	840	---	---	---	<250	---	<250	---	---	---	1,600	2,090	92.1	117	<0.50	1.4	275	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	42%	32%	1%	6%	---	---	5%	---
P5.25-3		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	720	720	<250	740	---	740	---	---	---	<250	---	<250	---	---	---	990	1,270	97.5	106	<0.50	0.86	85.6	---
DUP-6 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	720	720	<250	740	---	740	---	---	---	<250	---	<250	---	---	---	1,080	1,360	94.7	105	<0.50	0.88	84.7	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9%	7%	3%	1%	---	---	1%	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<250	<250	290	<250	<250	<250	<250	<250	<250	290	290	290	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.60	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12	290	<250 CR	<250 CR	290	<250 CR	<250 CR	<250	<250	<250	310	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	510	<250 CR	<250 CR	510	<250 CR	<250 CR	<250	<250	<250	350	<250 CR	<250 CR	<250	<250	<250	<100	250	207	<0.50	<0.50	<0.50	<0.75	<0.50
P5.25-5		Porewater EAZ	P5.25-5	ALS	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Well Not Sampled																						
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	650	<250 CR	<250 CR	650	<250 CR	<250 CR	380	<250 CR	<250 CR	490	<250 CR	<250 CR	350	<250 CR	<250 CR	530	1,180	636	2.5	<1.0	14.2	<1.4	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	640	<250 CR	<250 CR	640	<250 CR	<250 CR	360	<250 CR	<250 CR	420	<250 CR	<250 CR	300	<250 CR	<250 CR	360	880	488	14.0	<1.0	18.4	<1.4	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	200	101	4.62	<0.50	2.99	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	370	370	<250	370	370	370	<250	<250	<250	<250	<250	<250	<250	<250	<250	290	480	185	1.58	<0.50	1.79	1.51	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	450	450	480	450	---	450	<250	---	<250	480	---	480	<250	---	<250	1,430	2,030	580	13.2	<2.5	6.5	<3.5	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	220	340	116	7.39	<0.50	1.24	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	<250	<250	440	<250	---	<250	<250	---	<250	440	---	440	330	---	330	<100	<100	33.0	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	4-Dec-14	400	400	<250	400	---	400	<250	---	<250	<250	---	<250	<250	---	<250	<100	160	99.6	<0.50	<0.50	<0.60	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	150	58.6	<0.50	<0.50	0.52	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	28.4	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	17.1	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	16.3	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	12.5	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	17.1	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.31	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	6.91	<0.50	<0.50	<0.50	<0.75	---
P5.25-5		Porewater EAZ	P5.25-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	6.25	<0.50	<0.50	<0.50	<0.75	---
P5.5-3		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	1,690	1,690	270	1,730	---	1,730	1,030	---	1,030	270	---	270	<250	---	<250	<3,600	20,700	5,030	691	<50	9,350	6,280	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C_{10}-<C_{19}) [1]	Revised EPH$_w$ (C_{10}-<C_{19}) [1]	Final EPH$_w$ (C_{10}-<C_{19}) [1,6]	EPH$_w$(C_{10}-<C_{19}) [1] (Silica gel)	Revised EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	Final EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	EPH$_w$(C_{19}-C_{32})	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) [6]	EPH$_w$(C_{19}-C_{32}) (Silica gel)	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) (Silica gel)	VPH$_w$	VH$_w$ (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Apr-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	122,000	142,000	3,380	1,600	<25	4,660	10,500	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Apr-12	10,800	10,800	8,160	10,800	10,800	10,800	7,800	7,800	7,800	8,160	8,160	8,160	6,310	6,310	6,310	---	---	---	---	---	---	---	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-May-12	2,810	2,810	1,710	2,850	---	2,850	2,310	---	2,310	1,710	---	1,710	1,530	---	1,530	5,600	19,100	3,880	1,110	<25	2,880	5,670	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	2,040	2,040	860	2,090	2,090	2,090	1,340	1,340	1,340	860	860	860	640	640	640	4,600	14,700	3,200	797	<10	1,300	4,840	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	2,910	2,910	1,330	2,960	2,960	2,960	1,720	1,720	1,720	1,330	1,330	1,330	1,040	1,040	1,040	<2,000	9,300	2,940	580	1.09	283	3,570	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	1,590	1,590	520	1,620	1,620	1,620	490	490	490	520	520	520	290	290	290	1,600	5,900	1,890	111	<5.0	94.6	2,210	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	Well Not Sampled - Insufficient Water for Analysis																						
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5,600	10,900	2,210	274	<5.0	303	2,520	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	4,160	3,700 CR	1,640 CR	4,200	3,740 CR	3,740 CR	900	440 CR	440 CR	2,130	1,640 CR	1,640 CR	680	<250 CR	<250 CR	5,500	11,300	1,800	280	<5.0	383	3,350	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	1,700	1,390 CR	560 CR	1,730	1,420 CR	1,420 CR	890	500 CR	500 CR	910	560 CR	560 CR	330	<250 CR	<250 CR	4,800	8,900	1,100	206	<5.0	167	2,590	<5.0
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	1,670	1,670	<250	1,720	1,720	1,720	990	990	990	<250	<250	<250	<250	<250	<250	3,800	7,800	1,280	253	<5.0	113	2,350	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	1,500	1,500	<250	1,550	1,550	1,550	840	840	840	<250	<250	<250	<250	<250	<250	3,800	8,700	1,440	327	<10	222	2,890	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	1,830	1,590 CR	<250 CR	1,890	1,650 CR	1,650 CR	1,080	800 CR	800 CR	320	<250 CR	<250 CR	<250	<250	<250	1,500	6,500	1,230	697	<5.0	180	2,870	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	2,120	1,790 CR	<250 CR	2,140	1,820 CR	1,820 CR	750	430 CR	430 CR	500	<250 CR	<250 CR	300	<250 CR	<250 CR	3,120	5,090	687	214	<2.5	40.2	1,030	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	2,160	2,160	620	2,230	2,230	2,230	1,040	1,040	1,040	620	620	620	460	460	460	8,100	11,400	759	808	<2.5	84.2	1,720	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-14	1,670	1,670	910	1,720	---	1,720	870	---	870	910	---	910	490	---	490	3,490	5,880	625	554	<2.5	39.0	1,180	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	1,660	1,660	660	1,720	---	1,720	500	---	500	660	---	660	<250	---	<250	3,620	6,180	735	646	<2.5	36.2	1,140	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	2,200	2,200	700	2,250	---	2,250	530	---	530	700	---	700	450	---	450	4,570	6,460	539	255	<2.5	38.6	1,060	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	2,220	2,220	800	2,280	---	2,280	660	---	660	800	---	800	270	---	270	3,990	5,690	458	344	<2.5	13.5	874	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	1,290	1,290	470	1,330	---	1,330	900	---	900	470	---	470	350	---	350	3,090	4,670	418	329	<2.5	15	825	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	1,310	1,310	<250	1,340	---	1,340	---	---	---	<250	---	<250	---	---	---	2,950	4,450	341	339	<2.5	18.9	805	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	1,300	1,300	410	1,340	---	1,340	---	---	---	410	---	410	---	---	---	3,040	4,110	354	43.1	<2.5	14.2	665	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	1,270	1,270	<250	1,310	---	1,310	---	---	---	<250	---	<250	---	---	---	3,560	4,840	317	163	<2.5	15.1	787	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	1,230	1,230	290	1,280	---	1,280	---	---	---	290	---	290	---	---	---	4,000	4,900	173	102	<1.0	7.3	612	---
DUP-7 (P5.5-3R)		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	1,190	1,190	320	1,240	---	1,240	---	---	---	320	---	320	---	---	---	3,560	4,460	173	104	<1.0	7.3	618	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	12%	9%	0%	2%	---	0%	1%	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	1,270	1,270	<250	1,310	---	1,310	---	---	---	<250	---	<250	---	---	---	3,210	4,400	201	169	<2.5	15.4	803	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	1,310	1,310	380	1,340	---	1,340	---	---	---	380	---	380	---	---	---	1,410	2,990	326	133	<1.0	35.3	1,080	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	1,360	1,360	390	1,400	---	1,400	---	---	---	390	---	390	---	---	---	2,590	3,920	238	187	<1.3	16.8	893	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	1,160	1,160	<250	1,190	---	1,190	---	---	---	<250	---	<250	---	---	---	3,430	4,480	116	148	<0.50	8.22	774	---
P5.5-3R		Porewater EAZ	P5.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	1,130	1,130	680	1,160	---	1,160	---	---	---	680	---	680	---	---	---	2,710	3,620	116	164	<0.50	11.0	614	---
DUP-5 (P5.5-3R)		Porewater EAZ	P5.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	1,020	1,020	400	1,050	---	1,050	---	---	---	400	---	400	---	---	---	2,750	3,630	113	162	<0.50	10.7	595	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1%	0%	3%	1%	---	3%	3%	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Sep-11	290	290	<250	290	290	290	<250	<250	<250	<250	<250	<250	<250	<250	<250	130	150	25.0	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.82 J	<0.50	<0.50	<0.50	<0.75	5.36
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100 UJ	<100 UJ	7.08 J	<0.50 UJ	<0.50 UJ	<0.50 UJ	<0.75 UJ	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-11	350	350	<250	350	350	350	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	140	94.4	<0.50	<0.50	<0.80	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	350	<250 CR	500 CR	350	<250 CR	<250 CR	<250	<250	<250	720	500 CR	500 CR	<250	<250	<250	<100	280	270	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	43.1	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	40.6	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	410	490	77.8	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jun-12	270	270	<250	270	270	270	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	20.6	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jul-12	980	<500 CR	660 CR	980	<500 CR	<500 CR	670	<250 CR	<250 CR	1,220	660 CR	660 CR	530	<260 CR	<260 CR	<100	<100	30.4	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	26.7	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-12	690	<250 CR	<250 CR	690	<250 CR	<250 CR	590	<250 CR	<250 CR	720	<250 CR	<250 CR	560	<250 CR	<250 CR	<100	100	6.35	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Oct-12	800	<310 CR	<270 CR	800	<310 CR	<310 CR	520	<260 CR	<260 CR	540	<270 CR	<270 CR	440	<250 CR	<250 CR	170	180	7.01	0.61	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-12	1,010	490 CR	1,580 CR	1,010	490 CR	490 CR	520	<260 CR	<260 CR	2,060	1,580 CR	1,580 CR	480	<250 CR	<250 CR	<100	<100	23.8	<0.50	<0.50	<0.50	<0.75	5.14
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Jan-13	1,110	<400 CR	720 CR	1,110	<400 CR	<400 CR	480	<250 CR	<250 CR	1,580	720 CR	720 CR	440	<250 CR	<250 CR	110	300	189	0.65	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	---	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	Well Not Sampled																						
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-13	720	<350 CR	480 CR	720	<350 CR	<350 CR	500	<250 CR	<250 CR	890	480 CR	480 CR	360	<250 CR	<250 CR	570	850	276	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-May-13	1,110	<550 CR	480 CR	1,110	<550 CR	<550 CR	740	<260 CR	<260 CR	1,110	480 CR	480 CR	510	<260 CR	<260 CR	<100	100	30.0	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Jun-13	930	<500 CR	460 CR	930	<500 CR	<500 CR	520	<250 CR	<250 CR	980	460 CR	460 CR	430	<250 CR	<250 CR	270	300	24.0	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Sep-13	750	<290 CR	<310 CR	750	<290 CR	<290 CR	450	<250 CR	<250 CR	720	<310 CR	<310 CR	370	<250 CR	<250 CR	220	230	6.96	<0.50	<0.50	<0.50	<0.75	---
P6-8S	+	Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-13	580	290 CR	<250 CR	580	290 CR	290 CR	270	<250 CR	<250 CR	510	<250 CR	<250 CR	250	<250 CR	<250 CR	450	460	14.1	<0.50	<0.50	<0.50	<0.75	---
P6-8S-AG	+	Porewater EAZ	P6-8	Agat	DCM	DS	EB	0.8-1.0	0.8	1	Weathered Colluvium	---	9-Dec-13	240 J	240 J	380 J	240 J	---	240 J	---	---	---	380 J	---	380 J	---	---	---	---	---	---	---	---	---	---	---
P6-8S-MA	+	Porewater EAZ	P6-8	Maxxam	DCM	DS	EB	0.8-1.0	0.8	1	Weathered Colluvium	---	9-Dec-13	500 J+	500 J+	280 J+	500 J+	---	500 J+	---	---	---	280 J+	---	280 J+	---	---	---	---	---	---	---	---	---	---	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Dec-13	1,000	<340 CR	370 CR	1,000	<340 CR	<340 CR	---	---	---	1,090	370 CR	370 CR	---	---	---	---	---	---	---	---	---	---	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	330	330	260	330	---	330	<250	---	<250	260	---	260	<250	---	<250	300	320	16.9	<0.50	<0.50	<0.50	<0.75	---
P6-8S	+	Porewater EAZ	P6-8	ALS	BC	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	---	---	---	970	---	970	---	---	---	500	---	500	---	---	---	---	---	---	---	---	---	---	---
P6-8S-AG	+	Porewater EAZ	P6-8	Agat	BC	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	300	300	420	300	---	300	---	---	---	420	---	420	---	---	---	---	---	---	---	---	---	---	---
P6-8S-MA	+	Porewater EAZ	P6-8	Maxxam	BC	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	450	450	480	450 J	---	450 J	---	---	---	480 J	---	480 J	---	---	---	---	---	---	---	---	---	---	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	500	500	<250	500	---	500	<250	---	<250	<250	---	<250	<250	---	<250	200	200	1.06	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-14	370	370	<250	370	---	370	<250	---	<250	<250	---	<250	<250	---	<250	240	240	1.92	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Dec-14	680	680	260	680	---	680	<250	---	<250	260	---	260	<250	---	<250	230	230	1.89	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.10	<0.50	<0.50	<0.50	<0.75	---
P6-8S-B		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	600	600	380	600	---	600	<250	---	<250	380	---	380	<250	---	<250	---	---	---	---	---	---	---	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	110	110	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	170	180	2.16	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	200	210	5.51	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	130	130	2.15	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.92	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.64	<0.50	<0.50	<0.50	<0.75	---
P6-8S		Porewater EAZ	P6-8	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.30	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Sep-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.37	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	2.91	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.69	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<250	<250	320	<250	<250	<250	<250	<250	<250	320	320	320	<250	<250	<250	<100	<100	2.93	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	26.6	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	33.1	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.22	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	<250	<250	260	<250	<250	<250	<250	<250	<250	260	260	260	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.51	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-12	490	<250 CR	<250 CR	490	<250 CR	<250 CR	510	<250 CR	<250 CR	480	<250 CR	<250 CR	420	<250 CR	<250 CR	<100	<100	0.99	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.49	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.81	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	530 J	<250 CR	630 CR	530 J	<250 CR	<250 CR	330 J	<250 CR	<250 CR	1,020 J	630 CR	630 CR	300 J	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	5.86
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Well Not Sampled																						
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	450	<250 CR	320 CR	450	<250 CR	<250 CR	<250	<250	<250	770	320 CR	320 CR	<250	<250	<250	<100	<100	2.04	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	4.73	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	7.27	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	320	<250 CR	410 CR	320	<250 CR	<250 CR	250	<250 CR	<250 CR	660	410 CR	410 CR	<250	<250	<250	<100	<100	11.4	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.32	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.87	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.81	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	2.19	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	4.34	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.60	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	10.6	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	16.6	<0.50	<0.50	<0.50	<0.75	---
P6-8I		Porewater	P6-8	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	22.6	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.75	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.23	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	23.9	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.57	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$[2,6]	EPH$_w$(C$_{10}$-<C$_{19}$)[1]	Revised EPH$_w$ (C$_{10}$-<C$_{19}$)[1]	Final EPH$_w$ (C$_{10}$-<C$_{19}$)[1,6]	EPH$_w$(C$_{10}$-<C$_{19}$)[1] (Silica gel)	Revised EPH$_w$ (C$_{10}$-<C$_{19}$)[1] (Silica gel)	Final EPH$_w$ (C$_{10}$-<C$_{19}$)[1] (Silica gel)	EPH$_w$(C$_{19}$-C$_{32}$)	Revised EPH$_w$ (C$_{19}$-C$_{32}$)	Final EPH$_w$ (C$_{19}$-C$_{32}$)[6]	EPH$_w$(C$_{19}$-C$_{32}$) (Silica gel)	Revised EPH$_w$ (C$_{19}$-C$_{32}$)	Final EPH$_w$ (C$_{19}$-C$_{32}$) (Silica gel)	VPH$_w$	VH$_w$ (C$_6$-C$_{10}$)	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jul-12	<250	<250	**250**	<250	<250	<250	<250	<250	<250	**250**	**250**	**250**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Aug-12	**330**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	<250	<250	<250	**360**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**0.86**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-12	**510**	<250 CR	<250 CR	**510**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.04**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.77**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	**440 J**	<250 CR	**530 J,CR**	**440 J**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**880 J**	**530 CR**	**530 J,CR**	**340 J**	<250 CR	<250 CR	<100	<100	**1.63**	<0.50	<0.50	<0.50	<0.75	**6.41**
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	---	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	25-Feb-13	Well Not Sampled																						
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	**370**	<250 CR	**450 CR**	**370**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**780**	**450 CR**	**450 CR**	**290**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**3.40 J**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.54**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.54**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.77**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**2.24**	<0.50	<0.50	**0.65**	<0.75	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**43.6**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**49.9**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**13%**	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	**140**	**64.1**	<0.50	<0.50	<0.50	<0.75	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**9.92**	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4	4.4	Colluvium	---	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**9.94**	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**0%**	---	---	---	---	---
P6-8D		Porewater	P6-8	ALS	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	**150**	**83.1**	**0.57**	<0.50	**0.57**	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	26-Sep-11	<250	<250	**370 CR**	<250	<250	<250	<250	<250	<250	**450**	**370 CR**	**370 CR**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	**1.96**	**2.36**	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.87**	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-12	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	**430**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-13	**350**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-13	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**250**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-13	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	2-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	4-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P6-12S		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	15-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	<250	<250	**310**	<250	---	<250	---	---	---	**310**	---	**310**	---	---	---	---	---	---	---	---	---	---	---
P6-12S		Porewater EAZ	P6-12	ALS	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Sep-15	Well Not Sampled - Dry																						
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	15-Aug-16	---	---	---	<250	---	---	---	---	---	<250	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12S		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	26-Sep-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.51**	<0.50	<0.50	**0.75**	**0.91**	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.68**	<0.50	<0.50	<0.90	<0.78	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**41.4**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	6-Jun-12	**300**	**300**	<250	**300**	**300**	**300**	<250	<250	<250	<250	<250	<250	<250	<250	<250	**130**	**310**	**182**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.91**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Oct-12	**610**	<250 CR	<250 CR	**610**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**520**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	<100	<100	**1.03**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Nov-12	**270**	**270**	<250	**270**	**270**	**270**	<250	<250	<250	<250	<250	<250	<250	<250	<250	**110**	**120**	**5.03**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Dec-12	**330**	<250 CR	<250	**330**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	**110**	**120**	**4.49**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	13-Mar-13	**310**	**310**	<250	**310**	**310**	**310**	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	**130**	**40.6**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-13	**290**	**290**	<250	**290**	**290**	**290**	<250	<250	<250	<250	<250	<250	<250	<250	<250	**360**	**370**	**5.52**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-Sep-13	**360**	<250 CR	<250	**360**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	9-Dec-13	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<350	<100	<100	**1.32**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-14	**290**	**290**	<250	**290**	---	**290**	<250	---	<250	<250	---	<250	<250	---	<250	**190**	**190**	**4.35**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-14	**270**	**270**	<250	**270**	---	**270**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-14	**340**	**340**	<250	**340**	---	**340**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	2-Dec-14	**300**	**300**	<250	**300**	---	**300**	<250	---	<250	<250	---	<250	<250	---	<250	**110**	**110**	**1.74**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	**140**	**140**	**1.50**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.65**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.63**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.87**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**0.54**	<0.50	<0.50	<0.50	<0.75	---
P6-12I		Porewater EAZ	P6-12	ALS	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	26-Sep-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**11.0**	**0.63**	<0.50	**1.58**	**3.02**	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-12	<250	<250	**380**	<250	<250	<250	<250	<250	<250	**380**	**380**	**380**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Dec-12	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<250	<250	<250	**340**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	**2.76**
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**1.45**	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-13	**280**	<250 CR	<250	**280**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.58**	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Dec-13	**470**	<250 CR	**320 CR**	**470**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**670**	**320 CR**	**320 CR**	**390**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12D		Porewater	P6-12	ALS	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	**2,280**	**1,850 CR**	**920 CR**	**2,310**	**1,880 CR**	**1,880 CR**	**1,120**	**690 CR**	**690 CR**	**1,380**	**920 CR**	**920 CR**	**360**	<250 CR	<250 CR	<2,600	**15,700**	**3,090**	**965**	<2.5	**3,750**	**5,770**	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	1,220	870 CR	<250 CR	1,240	890 CR	890 CR	470	290 CR	290 CR	270	<250 CR	<250 CR	<250	<250	<250	4,000	7,890	2,030	579	<2.5	242	1,050	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	1,070	1,070	<250	1,070	1,070	1,070	<250	<250	<250	<250	<250	<250	<250	<250	<250	2,060	4,290	936	162	<2.5	90.1	1,040	<2.5
P6.25-3		Porewater EAZ	P6.25-3	ALS	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	1,450	1,450	<250	1,470	1,470	1,470	720	720	720	<250	<250	<250	<250	<250	<250	3,500	8,700	1,770	606	<5.0	266	2,520	---
P6.25-3A	~	Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	1,750	1,750	370	1,790	---	1,790	990	---	990	370	---	370	<250	---	<250	4,400	10,100	1,520	684	<10	379	3,150	---
P6.25-3B	~	Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	130	370	23.9	25.6	<0.50	14.0	181	---
P6.25-3C	~	Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	1,820	1,820	340	1,860	---	1,860	750	---	750	340	---	340	<250	---	<250	4,900	9,400	1,240	536	<10	308	2,470	---
P6.25-3D	~	Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	1,790	1,530 CR	<250 CR	1,830	1,580 CR	1,580 CR	810	560 CR	560 CR	310	<250 CR	<250 CR	<250	<250	<250	5,300	9,100	1,340	664	<5.0	114	1,630	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	2,380	1,830 CR	<250 CR	2,420	1,860 CR	1,860 CR	760	340 CR	340 CR	420	<250 CR	<250 CR	270	<250 CR	<250 CR	4,700	7,500	996	675	<2.5	51.2	1,050	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Dec-13	2,480	1,870 CR	<300 CR	2,520	1,900 CR	1,900 CR	860	450 CR	450 CR	590	<300 CR	<300 CR	410	<250 CR	<250 CR	4,600	7,150	701	684	<2.5	37.0	1,090	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	800	800	<250	800	---	800	330	---	330	<250	---	<250	<250	---	<250	1,700	2,970	393	204	<2.5	16.2	652	---
P6.25-3	+	Porewater EAZ	P6.25-3	ALS	BC	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	---	---	---	2,500	---	2,500	---	---	---	550	---	550	---	---	---	---	---	---	---	---	---	---	---
P6.25-3-AG	+	Porewater EAZ	P6.25-3	Agat	BC	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	830	830	300	840	---	840	---	---	---	300	---	300	---	---	---	---	---	---	---	---	---	---	---
P6.25-3-MA	+	Porewater EAZ	P6.25-3	Maxxam	BC	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,400	1,400	920	1,400 J	---	1,400 J	---	---	---	920 J	---	920 J	---	---	---	---	---	---	---	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	13-Jun-14	1,040	1,040	<250	1,050	---	1,050	300	---	300	<250	---	<250	<250	---	<250	2,900	4,990	646	445	<2.5	5.06	946	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	1,220	1,220	<250	1,230	---	1,230	370	---	370	<250	---	<250	<250	---	<250	2,130	3,910	579	256	<2.5	133	814	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	1,510 J	1,510 J	350 J	1,520 J	---	1,520 J	<250	---	<250	350 J	---	350 J	<250	---	<250	1,450	2,080	313	113	<2.5	35.4	166	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	330	330	<250	330	---	330	<250	---	<250	<250	---	<250	<250	---	<250	1,000	1,330	244	35.6	<1.0	4.1	38.7	---
DUP-5 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	310	310	<250	310	---	310	<250	---	<250	<250	---	<250	<250	---	<250	1,020	1,320	217	36.4	<1.0	4.2	42.7	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	1%	12%	2%	---	2%	10%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-Jun-15	580	580	<250	590	---	590	---	---	---	<250	---	<250	---	---	---	1,440	2,000	350	61.4	<2.5	5.3	141	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	450	450	<250	450	---	450	---	---	---	<250	---	<250	---	---	---	1,020	1,540	333	37.0	<2.5	15.0	127	---
DUP-7 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	480	480	<250	490	---	490	---	---	---	<250	---	<250	---	---	---	1,290	1,840	338	46.1	<1.0	14.6	152	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	23%	18%	1%	22%	---	3%	18%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	380	380	<250	380	---	380	---	---	---	<250	---	<250	---	---	---	560	820	170	12.3	<0.50	14.2	60.7	---
DUP-6 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	450	450	<250	460	---	460	---	---	---	<250	---	<250	---	---	---	600	880	185	14.7	<0.50	16.2	71.9	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7%	7%	8%	18%	---	13%	17%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	2-Mar-16	<250	<250	560	<250	---	<250	---	---	---	560	---	560	---	---	---	140	240	44	13.3	<0.50	1.36	35	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	250	250	<250	250	---	250	---	---	---	<250	---	<250	---	---	---	360	500	89.4	20.6	<0.50	3.67	25.3	---
DUP-3 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	350	490	92.4	21.0	<0.50	3.79	25.8	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	2%	---	3%	2%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	420	420	<250	430	---	430	---	---	---	<250	---	<250	---	---	---	<200	550	286	16.2	<1.0	2.4	48.8	---
DUP-2 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	380	380	<250	380	---	380	---	---	---	<250	---	<250	---	---	---	420	760	275	15.9	<1.0	2.3	47.9	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	32%	4%	2%	---	---	2%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	420	420	<250	420	---	420	---	---	---	<250	---	<250	---	---	---	1,400	1,730	120	32.4	<0.50	24.7	155	---
DUP-8 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	320	320	<250	320	---	320	---	---	---	<250	---	<250	---	---	---	1,040	1,360	119	28.3	<0.50	23.6	153	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	30%	24%	1%	14%	---	5%	1%	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	360	520	150	1.61	<0.50	0.58	2.55	---
DUP-6 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	<250	<250	320	<250	---	<250	---	---	---	320	---	320	---	---	---	390	540	138	1.48	<0.50	0.55	1.86	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4%	8%	---	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	490	610	109	4.09	<0.50	3.93	3.17	---
DUP-4 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	250	250	<250	250	---	250	---	---	---	<250	---	<250	---	---	---	490	620	116	4.30	<0.50	4.09	2.63	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	6%	5%	---	4%	---	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	1,490	1,490	690	1,520	1,520	1,520	590	590	590	690	690	690	<250	<250	<250	1,760	5,660	1,800	520	<0.50	97.9	1,480	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-12	1,350	960 CR	<250 CR	1,370	980 CR	980 CR	580	300 CR	300 CR	350	<250 CR	<250 CR	260	<250 CR	<250 CR	5,170	5,630	188	93.6	<0.50	3.85	168	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	1,660	1,450 CR	<250 CR	1,700	1,490 CR	1,490 CR	650	350 CR	350 CR	350	<250 CR	<250 CR	<250	<250	<250	2,280	4,650	901	366	<2.5	41.1	1,070	<2.5
P6.5-3		Porewater EAZ	P6.5-3	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	1,550	1,550	<250	1,580	1,580	1,580	870	870	870	<250	<250	<250	<250	<250	<250	3,080	5,180	989	233	<5.0	81.5	792	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	1,710	1,470 CR	<250 CR	1,740	1,500 CR	1,500 CR	780	540 CR	540 CR	320 J	<250 CR	<250 CR	<250	<250	<250	6,100	8,600	1,100	401	<5.0	68.3	961	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	1,600	1,600	<250	1,620	1,620	1,620	500	500	500	<250	<250	<250	<250	<250	<250	2,060	3,440	490	328	<1.0	15.8	554	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	1,510	1,280 CR	<250 CR	1,520	1,280 CR	1,280 CR	690 J	450 CR	450 J,CR	300 J	<250 CR	<250 CR	270	<250 CR	<250 CR	2,610	3,230	223	156	<2.5	4.9	239	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,120	1,120	<250	1,150	---	1,150	720	---	720	<250	---	<250	<250	---	<250	3,230	2,250	297	213	<0.50	6.32	467	---
P6.5-3	+	Porewater EAZ	P6.5-3	ALS	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	---	---	---	2,770	---	2,770	---	---	---	510	---	510	---	---	---	---	---	---	---	---	---	---	---
P6.5-3-AG	+	Porewater EAZ	P6.5-3	Agat	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,130	1,130	260	1,140	---	1,140	---	---	---	260	---	260	---	---	---	---	---	---	---	---	---	---	---
P6.5-3-MA	+	Porewater EAZ	P6.5-3	Maxxam	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,600	1,600	790	1,600 J	---	1,600 J	---	---	---	790 J	---	790 J	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	1,430	1,430	<250	1,440	---	1,440	480	---	480	<250	---	<250	<250	---	<250	1,990	2,860	501	116	<2.5	3.4	254	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	1,170	1,170	<250	1,170	---	1,170	310	---	310	<250	---	<250	<250	---	<250	1,270	1,770	280	41.7	<2.5 UJ	5.8	178	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	1,220	1,220	340	1,230	---	1,230	<250	---	<250	340	---	340	<250	---	<250	750	1,000	118	33.8	<0.50	2.46	88.4	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	450	610	97.8	41.2	<0.50	0.86	15.1	---
DUP-8 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	400	550	94.1	39.6	<0.50	0.95	14.5	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10%	4%	4%	---	---	4%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	230	350	99.5	3.05	<0.50	0.98	16.9	---
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	220	340	103	3.06	<0.50	1.00	17.0	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	0%	---	---	1%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	530	530	<250	540	---	540	---	---	---	<250	---	<250	---	---	---	1,200	1,460	123	8.2	<1.0	2.0	133	---
DUP-6 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	550	550	<250	550	---	550	---	---	---	<250	---	<250	---	---	---	1,780	2,030	121	7.1	<1.0	1.7	120	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	39%	33%	2%	14%	---	---	10%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	520	520	<250	530	---	530	---	---	---	<250	---	<250	---	---	---	550	680	89.6	1.88	<0.50	1.00	33.3	---
DUP-5 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	470	470	<250	470	---	470	---	---	---	<250	---	<250	---	---	---	600	720	86.1	1.82	<0.50	1.00	30.9	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9%	6%	4%	---	---	---	7%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	610	610	290	610	---	610	---	---	---	290	---	290	---	---	---	900	1,110	160	27.8	<0.50	1.63	23.8	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	550	550	<250	550	---	550	---	---	---	<250	---	<250	---	---	---	240	380	119	15.8	<0.50	1.10	6.33	---
DUP-4 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	380	380	<250	380	---	380	---	---	---	<250	---	<250	---	---	---	210	350	114	14.1	<0.50	1.06	5.82	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4%	11%	---	---	8%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	470	470	<250	470	---	470	---	---	---	<250	---	<250	---	---	---	450	560	83.6	1.62	<0.50	1.31	22.4	---
DUP-3 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	480	480	<250	480	---	480	---	---	---	<250	---	<250	---	---	---	460	580	87.3	1.62	<0.50	1.32	22.2	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4%	4%	---	---	---	1%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	560	560	<250	560	---	560	---	---	---	<250	---	<250	---	---	---	760	820	47.7	1.83	<0.50	0.94	7.63	---
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	600	600	<250	600	---	600	---	---	---	<250	---	<250	---	---	---	720	770	46.9	1.64	<0.50	1.03	6.40	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5%	6%	2%	---	---	---	18%	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	350	420	64.9	2.77	<0.50	0.57	1.39	---
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	320	400	67.2	2.74	<0.50	0.56	1.22	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	1%	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	370	370	<250	370	---	370	---	---	---	<250	---	<250	---	---	---	700	920	168	37.5	<0.50	2.23	5.99	---
DUP-3 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	350	350	<250	350	---	350	---	---	---	<250	---	<250	---	---	---	690	900	162	36.1	<0.50	2.17	5.61	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1%	2%	4%	4%	---	---	7%	---
P6.75-3		Porewater EAZ	P6.75-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	2,930	2,150 CR	940 CR	2,980	2,200 CR	2,200 CR	1,590	810 CR	810 CR	1,760	940 CR	940 CR	790	<400 CR	<400 CR	<5,000	9,900	1,670	277	0.57	1,010	4,430	---
P6.75-3		Porewater EAZ	P6.75-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	1,640	1,440 CR	<250 CR	1,660	1,460 CR	1,460 CR	430	<250 CR	<250 CR	330	<250 CR	<250 CR	<250	<250	<250	3,160	5,520	811	221	<1.0	294	1,030	---
P6.75-3		Porewater EAZ	P6.75-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	2,290	2,010 CR	280 CR	2,340	2,050 CR	2,050 CR	1,000	710 CR	710 CR	590	280 CR	280 CR	<250	<250	<250	5,500	9,000	1,330	548	<5.0	104	1,490	<5.0
P6.75-3		Porewater EAZ	P6.75-3	ALS	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P6.75-3		Porewater EAZ	P6.75-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	850	340 CR	<250 CR	860	340 CR	340 CR	560	270 CR	270 CR	440	<250 CR	<250 CR	280	<250 CR	<250 CR	440	640	50.9	27.9	<0.50	5.11 J	116	---
P6.75-3		Porewater EAZ	P6.75-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	390	<250 CR	<250 CR	390	<250 CR	<250 CR	370	<250 CR	<250 CR	410	<250 CR	<250 CR	340	<250 CR	<250 CR	<100	<100	2.41	0.66	<0.50	<0.50	1.91	---
P6.75-3		Porewater EAZ	P6.75-3	ALS	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	Well Destroyed																						
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	6-Dec-11	2,040	2,040	570	2,050	---	2,050	900	---	900	570	---	570	490	---	490	<2,500	15,000	2,990	454	<10	6,440	3,170	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jan-12	4,010	4,010	2,430	4,010	---	4,010	3,190	---	3,190	2,430	---	2,430	2,450	---	2,450	<2,100	12,500	3,310	659	<5.0	3,480	4,110	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Feb-12	4,680	4,680	3,610	4,690	4,690	4,690	3,010	3,010	3,010	3,610	3,610	3,610	2,670	2,670	2,670	25,900	37,400	2,270	655	<10	3,150	5,390	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-12	<2,500	<2,500	1,260	<2,500	---	<2,500	<2,000	---	<2,000	1,260	---	1,260	1,280	---	1,280	2,600	12,000	2,440	684	<10	1,900	4,420	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Apr-12	19,000	19,000	16,800	19,000	19,000	19,000	12,400	12,400	12,400	16,800	16,800	16,800	11,600	11,600	11,600	44,700	55,600	2,470	863	<25	1,650	5,910	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-May-12	1,500	1,500	950	1,500	---	1,500	790	---	790	950	---	950	680	---	680	3,300	10,500	1,700	422	<5.0	1,130	3,920	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	5-Jun-12	8,190	8,190	7,680	8,190	8,190	8,190	6,320	6,320	6,320	7,680	7,680	7,680	6,690	6,690	6,690	3,000	7,200	1,370	162	<5.0	343	2,260	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jul-12	3,270	3,270	3,080	3,280	3,280	3,280	1,550	1,550	1,550	3,080	3,080	3,080	1,760	1,760	1,760	4,300	8,100	1,280	206	<5.0	82.4	2,190	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Aug-12	1,850	1,550 CR	<300 CR	1,860	1,550 CR	1,550 CR	970	640 CR	640 CR	610	<300 CR	<300 CR	600	<300 CR	<300 CR	4,500	4,700	91.6	4.61	<0.50	1.33	106	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-12	920	920	570	930	930	930	360	360	360	570	570	570	420	420	420	1,600	2,240	411	53.0	<1.0	4.8	170	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Oct-12	2,140	1,470 CR	700 CR	2,140	1,470 CR	1,470 CR	1,090	440 CR	440 CR	1,410	700 CR	700 CR	1,080	400 CR	400 CR	3,250	4,220	650	62.9	<2.5	3.9	256	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Nov-12	1,960	1,960	1,440	1,960	1,960	1,960	890	890	890	1,440	1,440	1,440	990	990	990	2,810	4,580	617	315	<1.0	24.9	822	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-12	2,150	1,990 CR	1,840 CR	2,160	1,990 CR	1,990 CR	640	460 CR	460 CR	2,020	1,840 CR	1,840 CR	880	680 CR	680 CR	2,870	4,520	716	275	<2.5	12.7	641	<2.5
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Jan-13	1,460	1,460	460	1,470	1,470	1,470	690	690	690	460	460	460	390	390	390	2,790	4,420	700	297	<2.5	5.2	628	---
P7-3		Porewater EAZ	P7-3	ALS	---	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	25-Feb-13	Well Not Sampled																						
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Mar-13	2,090	2,090	690	2,100	2,100	2,100	980	980	980	690	690	690	450	450	450	3,100	5,800	990	472	<5.0	15.5	1,180	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Jun-13	2,060	1,610 CR	570 CR	2,070	1,620 CR	1,620 CR	1,010	560 CR	560 CR	1,040	570 CR	570 CR	680	<250 CR	<250 CR	1,240	2,330	393	150	<1.0	5.0	542	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Sep-13	2,390	1,860 CR	1,830 CR	2,400	1,860 CR	1,860 CR	1,290	860 CR	860 CR	2,400	1,830 CR	1,830 CR	2,020	1,560 CR	1,560 CR	1,160	1,690	235	60.6	<0.50	2.27	233	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-13	2,620	2,190 CR	1,870 CR	2,630	2,200 CR	2,200 CR	1,200	770 CR	770 CR	2,320	1,870 CR	1,870 CR	1,560	1,100 CR	1,100 CR	1,490	2,300	158	186	<0.50	3.57	460	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	1,610	1,610	540	1,620	---	1,620	880	---	880	540	---	540	420	---	420	4,470	2,600	411	381	<2.5	7.0	1,070	---
P7-3	+	Porewater EAZ	P7-3	ALS	BC	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	---	---	---	4,330	---	4,330	---	---	---	1,290	---	1,290	---	---	---	---	---	---	---	---	---	---	---
P7-3-AG	+	Porewater EAZ	P7-3	Agat	BC	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	3,140	3,140	1,060	3,150	---	3,150	---	---	---	1,060	---	1,060	---	---	---	---	---	---	---	---	---	---	---
P7-3-MA	+	Porewater EAZ	P7-3	Maxxam	BC	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	1,900	1,900	800	1,900 J	---	1,900 J	---	---	---	800 J	---	800 J	---	---	---	---	---	---	---	---	---	---	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Jun-14	1,380	1,380	1,300	1,380	---	1,380	640	---	640	1,300	---	1,300	840	---	840	3,920	4,880	377	257	<2.5	5.9	313	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-14	2,100	2,100	720	2,100	---	2,100	550	---	550	720	---	720	600	---	600	1,550	2,000	162	34.0	<1.0	2.0	246	---
P7-3		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	3-Dec-14	2,640	2,640	1,310	2,650	---	2,650	680	---	680	1,310	---	1,310	860	---	860	1,400	2,040	178	88.6	<1.0	2.9	376	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	770	770	<250	780	---	780	520	---	520	<250	---	<250	<250	---	<250	970	1,330	191	88.4	<1.0	1.8	75.8	---
P7-3-B		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	1,150	1,150	600	1,160	---	1,160	460	---	460	600	---	600	<250	---	<250	---	---	---	---	---	---	---	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	700	700	<250	700	---	700	---	---	---	<250	---	<250	---	---	---	660	780	67.9	4.75	<0.50	0.95	47.3	---
DUP-6 (P7-3)		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	530	530	<250	780	---	780	---	---	---	<250	---	<250	---	---	---	630	750	65.6	4.79	<0.50	0.93	46.9	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5%	4%	3%	1%	---	---	1%	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	11-Sep-15	1,010	1,010	270	1,020	---	1,020	---	---	---	270	---	270	---	---	---	730	820	47.6	1.84	<0.50	0.60	39.9	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-Dec-15	1,070	1,070	<250	1,070	---	1,070	---	---	---	<250	---	<250	---	---	---	610	790	59.0	1.11	<0.50	0.77	117	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	1,220	1,220	<250	1,220	---	1,220	---	---	---	<250	---	<250	---	---	---	820	1,020	90.9	15.4	<0.50	<0.70	98.8	---
DUP-6 (P7-3)		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	1,130	1,130	<250	1,140	---	1,140	---	---	---	<250	---	<250	---	---	---	900	1,120	94.2	16.7	<0.50	<0.80	109	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9%	9%	4%	8%	---	---	10%	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-May-16	700	700	340	700	---	700	---	---	---	340	---	340	---	---	---	820	870	41.5	5.78	<0.50	<0.50	0.82	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Aug-16	730	730	620	730	---	730	---	---	---	620	---	620	---	---	---	460	480	19.5	<0.50	<0.50	<0.50	1.78	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	820	820	<250	820	---	820	---	---	---	<250	---	<250	---	---	---	450	500	27.4	1.32	<0.50	0.52	18.5	---
DUP-5 (P7-3)		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	880	880	<250	880	---	880	---	---	---	<250	---	<250	---	---	---	440	490	28.8	1.26	<0.50	0.52	19.4	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5%	---	---	---	5%	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Mar-17	820	820	<250	820	---	820	---	---	---	<250	---	<250	---	---	---	540	600	54.7	4.93	<0.50	<0.50	2.36	---
P7-3		Porewater EAZ	P7-3	ALS	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	7-Jun-17	700	700	<250	700	---	700	---	---	---	<250	---	<250	---	---	---	840	980	100	27.6	<0.50	0.82	11.0	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	840	500 CR	520 CR	840	500 CR	500 CR	380	<250 CR	<250 CR	880	520 CR	520 CR	530	<250 CR	<250 CR	<230	990	1,140	<0.50	<0.50	13.2	2.47	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	550	<300 CR	<250 CR	550	<300 CR	<300 CR	270	<250 CR	<250 CR	380	<250 CR	<250 CR	260	<250 CR	<250 CR	<500	1,150	861	<2.5	<2.5	<2.5	<3.5	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	630	350 CR	420 CR	630	350 CR	350 CR	<250	<250	<250	730	420 CR	420 CR	<250	<250	<250	890	1,300	354	48.1	<1.0	3.0	2.8	<1.0
P7-5		Porewater EAZ	P7-5	ALS	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Well Not Sampled																						
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	500	500	260	500	500	500	<250	<250	<250	260	260	260	<250	<250	<250	1,010	2,060	808	236	<2.5	9.8 J	<3.5	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	750	390 CR	<250 CR	750	390 CR	390 CR	300	<250 CR	<250 CR	430	<250 CR	<250 CR	<250	<250	<250	1,760	2,670	629	264	<1.0	11.6	10.4	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	340	340	<250	340	340	340	<250	<250	<250	<250	<250	<250	<250	<250	<250	280	730	441	1.9	<1.0	4.6	2.2	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	1,110	660 CR	<250 CR	1,110	660 CR	660 CR	360	<250 CR	<250 CR	650	<250 CR	<250 CR	360	<250 CR	<250 CR	730	1,100	362	<1.0	<1.0	3.2	<1.4	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	460	460	<250	460	---	460	<250	---	<250	<250	---	<250	<250	---	<250	1,100	1,440	310	18.2	<0.50	13.9	4.23	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	530	530	<250	530	---	530	<250	---	<250	<250	---	<250	<250	---	<250	610	1,090	378	8.54	<1.0	8.8	3.6	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	490	490	<250	490	---	490	<250	---	<250	<250	---	<250	<250	---	<250	220	520	305	<1.0	<1.0	1.5	2.8	---
P7-5		Porewater EAZ	P7-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	920	920	340	920	---	920	<250	---	<250	340	---	340	<250	---	<250	350	470	117	<0.50	<0.50	<0.50	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	430	600	162	0.88	<0.50	2.15	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	440	440	270	440	---	440	---	---	---	270	---	270	---	---	---	580	810	213	3.62	<0.50	4.78	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	230	330	104	<0.50	<0.50	1.01	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	380	460	76.6	<0.50	<0.50	0.52	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	300	410	111	<0.50	<0.50	<0.50	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	260	380	110	<0.50	<0.50	0.83	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	240	360	121	<0.50	<0.50	1.72	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	120	140	15.3	<0.50	<0.50	0.81	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	330	480	143	<0.50	<0.50	0.57	<0.75	---
P7-5		Porewater EAZ	P7-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	230	360	123	<0.50	<0.50	2.03	<0.75	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	4-Jun-12	2,620	2,010 CR	710 CR	2,640	2,020 CR	2,020 CR	1,240	620 CR	620 CR	1,370	710 CR	710 CR	520	<260 CR	<260 CR	3,000	6,200	796	264	<5.0	243	1,950	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-12	820	820	<250	830	830	830	290	290	290	<250	<250	<250	<250	<250	<250	2,840	4,380	621	209	<2.5	10.1	697	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-12	2,020	2,020	<250	2,070	2,070	2,070	1,200	1,200	1,200	<250	<250	<250	<250	<250	<250	6,300	9,100	671	517	<5.0	34.5	1,570	<5.0
P7.5-3		Porewater EAZ	P7.5-3	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	25-Feb-13	Well Not Sampled																						
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Mar-13	2,110	2,110	<250	2,160	2,160	2,160	1,210	1,210	1,210	<250	<250	<250	<250	<250	<250	4,900	7,100	446	450	<5.0	20.2	1,220	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	8-May-13	1,850	1,850	<250	1,890	1,890	1,890	1,370	1,370	1,370	<250	<250	<250	<250	<250	<250	4,110	6,060	299	381	<1.0	42.6	1,230	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Jun-13	1,730	1,730	<250	1,760	1,760	1,760	980	980	980	<250	<250	<250	<250	<250	<250	3,380	4,710	183	347	<1.0	9.4	789	---
P7.5-3-A	@	Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Jun-13	1,960	1,960	<250	2,000	2,000	2,000	1,130	1,130	1,130	<250	<250	<250	<250	<250	<250	3,470	5,090	294	402	<1.0	18.5	907	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Sep-13	1,840	1,840	<250	1,860	1,860	1,860	650	650	650	<250	<250	<250	<250	<250	<250	2,860	4,110	199	300	<0.50	9.62	744	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-13	2,310	1,660 CR	<250 CR	2,330	1,690 CR	1,690 CR	990	600 CR	600 CR	480	<250 CR	<250 CR	280	<250 CR	<250 CR	2,740	3,830	103	256	<0.50	5.16	724	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	1,600	1,600	<250	1,630	---	1,630	1,120	---	1,120	<250	---	<250	<250	---	<250	4,000	4,670	70.6	204	<2.5 UJ	3.0 J	394	---
P7.5-3	+	Porewater EAZ	P7.5-3	ALS	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	---	---	---	2,470	---	2,470	---	---	---	410 J	---	410 J	---	---	---	---	---	---	---	---	---	---	---
P7.5-3-AG	+	Porewater EAZ	P7.5-3	Agat	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	2,370 J	2,370 J	660 J	2,390 J	---	2,390 J	---	---	---	660 J	---	660 J	---	---	---	---	---	---	---	---	---	---	---
P7.5-3-MA	+	Porewater EAZ	P7.5-3	Maxxam	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	1,600	1,600	350	1,700 J	---	1,700 J	---	---	---	350 J	---	350 J	---	---	---	---	---	---	---	---	---	---	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	1,450	1,450	<250	1,470	---	1,470	550	---	550	<250	---	<250	<250	---	<250	2,280	2,820	47.3	163	<0.50	2.85	328	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-14	2,390 J	2,390	<250	2,410	---	2,410 J	700	---	700	<250	---	<250	<250	---	<250	3,070	3,830	47.8	186	<1.0 UJ	6.2	518	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	2,040	2,040	310	2,050	---	2,050	460	---	460	310	---	310	<250	---	<250	2,120	2,620	14.7	145	<1.0	2.5	345	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	860	860	<250	870	---	870	670	---	670	<250	---	<250	<250	---	<250	1,190	1,390	6.46	47.3	<0.50	1.23	141	---
DUP-7 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	850	850	<250	860	---	860	580	---	580	<250	---	<250	<250	---	<250	1,230	1,440	6.72	51.2	<0.50	1.31	152	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	4%	4%	8%	---	---	8%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	1,240	1,240	<250	1,250	---	1,250	---	---	---	<250	---	<250	---	---	---	2,000	2,350	13.2	66.8	<0.50	2.20	260	---
DUP-5 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	1,120	1,120	<250	1,130	---	1,130	---	---	---	<250	---	<250	---	---	---	2,060	2,390	13.1	64.4	<0.50	2.15	258	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	2%	1%	4%	---	---	1%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	1,310	1,310	<250	1,330	---	1,330	---	---	---	<250	---	<250	---	---	---	2,460	3,000	8.2	94.9	<1.0	3.4	442	---
DUP-5 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	1,400	1,400	<250	1,420	---	1,420	---	---	---	<250	---	<250	---	---	---	2,620	3,170	8.2	95.6	<1.0	3.5	449	---
QA/QC RPD													Duplicates	7%	7%	---	7%	---	7%	---	---	---	---	---	---	---	---	---	6%	6%	0%	1%	---	3%	2%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	540	540	<250	550	---	550	---	---	---	<250	---	<250	---	---	---	270	310	4.82	4.66	<0.50	<0.50	29.4	---
DUP-4 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	680	680	<250	690	---	690	---	---	---	<250	---	<250	---	---	---	250	290	4.73	4.42	<0.50	<0.50	27.8	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	5%	---	---	6%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	880	880	<250	880	---	880	---	---	---	<250	---	<250	---	---	---	1,280	1,380	3.74	30.9	<0.50	<0.70	70	---
DUP-5 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	790	790	<250	800	---	800	---	---	---	<250	---	<250	---	---	---	1,290	1,390	3.73	30.9	<0.50	<0.70	69.8	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1%	1%	0%	0%	---	---	0%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	620	620	<250	620	---	620	---	---	---	<250	---	<250	---	---	---	230	270	2.39	12.7	<0.50	0.88	23.0	---
DUP-6 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	710	710	<250	720	---	720	---	---	---	<250	---	<250	---	---	---	220	260	2.39	12.6	<0.50	0.89	23.0	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1%	---	---	0%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	1,190	1,190	280	1,190	---	1,190	---	---	---	280	---	280	---	---	---	1,000	1,070	4.33	4.59	<0.50	0.74	64.3	---
DUP-4 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	1,100	1,100	<250	1,100	---	1,100	---	---	---	<250	---	<250	---	---	---	1,140	1,220	4.56	4.69	<0.50	0.76	66.0	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	13%	13%	5%	2%	---	---	3%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	1,020	1,020	<250	1,020	---	1,020	---	---	---	<250	---	<250	---	---	---	1,030	1,040	3.87	2.98	<0.50	<0.50	8.76	---
DUP-2 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	1,060	1,060	<250	1,060	---	1,060	---	---	---	<250	---	<250	---	---	---	850	870	3.91	4.22	<0.50	<0.50	13.9	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	19%	18%	1%	34%	---	---	45%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	750	750	<250	750	---	750	---	---	---	<250	---	<250	---	---	---	1,050	1,090	2.87	12.5	<0.50	<0.50	20.8	---
DUP-8 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	720	720	<250	730	---	730	---	---	---	<250	---	<250	---	---	---	1,190	1,230	2.63	15.3	<0.50	<0.50	25.8	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	13%	12%	9%	20%	---	---	21%	---
P7.5-3		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	570	570	<250	580	---	580	---	---	---	<250	---	<250	---	---	---	710	740	3.17	7.15	<0.50	<0.50	20.3	---
DUP-2 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	590	590	<250	590	---	590	---	---	---	<250	---	<250	---	---	---	680	720	<4.0	8.16	<0.50	<0.50	22.5	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	4%	3%	---	13%	---	---	10%	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	4-Jun-12	1,210	850 CR	860 CR	1,210	850 CR	850 CR	490	<250 CR	<250 CR	1,250	860 CR	860 CR	350	<250 CR	<250 CR	1,600	7,220	1,310	426	<2.5	932	2,980	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-12	1,330	1,330	<250	1,330	1,330	1,330	<250	<250	<250	<250	<250	<250	<250	<250	<250	1,820	3,730	635	295	<0.50	19.9	962	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-12	1,130	700 CR	<250 CR	1,130	700 CR	700 CR	270	<250 CR	<250 CR	420	<250 CR	<250 CR	<250	<250	<250	1,560	2,900	539	124	<1.0	19.8	654	<1.0
P8-3		Porewater EAZ	P8-3	ALS	---	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	25-Feb-13	Well Not Sampled																						
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Mar-13	800	800	270	800	800	800	300	300	300	270	270	270	250	250	250	980	2,290	518	87.6	<2.5	38.7	658	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	810	810	<250	810	810	810	270	270	270	<250	<250	<250	<250	<250	<250	900 J	2,480 J	513	296	<1.0	50.7	722	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Sep-13	1,180	990 CR	<250 CR	1,180	990 CR	990 CR	380	<250 CR	<250 CR	270	<250 CR	<250 CR	<250	<250	<250	1,690	2,460	233	307	<1.0	2.7	223	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-13	1,420	1,210 CR	<250 CR	1,420	1,210 CR	1,210 CR	380	<250 CR	<250 CR	340	<250 CR	<250 CR	<250	<250	<250	1,450	2,140	182	196	<0.50	3.21	312	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	1,030	1,030	<250	1,030	---	1,030	280	---	280	<250	---	<250	<250	---	<250	2,060	1,520	88.0	169	<1.0	3.2	282	---
P8-3	+	Porewater EAZ	P8-3	ALS	BC	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	---	---	---	3,150	---	3,150	---	---	---	470	---	470	---	---	---	---	---	---	---	---	---	---	---
P8-3-AG	+	Porewater EAZ	P8-3	Agat	BC	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	2,710	2,710	690	2,710	---	2,710	---	---	---	690	---	690	---	---	---	---	---	---	---	---	---	---	---
P8-3-MA	+	Porewater EAZ	P8-3	Maxxam	BC	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	1,100	1,100	430	1,100 J	---	1,100 J	---	---	---	430 J	---	430 J	---	---	---	---	---	---	---	---	---	---	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	690	690	<250	690	---	690	<250	---	<250	<250	---	<250	<250	---	<250	870	1,220	81.0	154	<0.50	2.85	111	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	900	900	<250	900	---	900	<250	---	<250	<250	---	<250	<250	---	<250	810	1,110	104	118	<0.50	2.90	76.4	---
P8-3		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	1,590	1,590	<250	1,590	---	1,590	<250	---	<250	<250	---	<250	<250	---	<250	670	780	78.8	13.5	<0.50	1.47	22.2	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	360	360	<250	360	---	360	<250	---	<250	<250	---	<250	<250	---	<250	660	780	56.5	38.8	<0.50	1.91	25.4	---
DUP-6 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	360	360	<250	360	---	360	<250	---	<250	<250	---	<250	<250	---	<250	640	770	58.2	40.3	<0.50	1.89	26.2	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	1%	3%	4%	---	---	3%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	540	540	<250	540	---	540	---	---	---	<250	---	<250	---	---	---	640	810	99.3	6.71	<0.50	4.05	62.5	---
DUP-4 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	570	570	<250	570	---	570	---	---	---	<250	---	<250	---	---	---	650	810	96.0	6.38	<0.50	3.89	59.7	
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	0%	3%	5%	---	4%	5%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	410	410	<250	410	---	410	---	---	---	<250	---	<250	---	---	---	480	570	79.3	2.17	<0.50	1.31	7.87	---
DUP-4 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	390	390	<250	390	---	390	---	---	---	<250	---	<250	---	---	---	430	520	74.8	2.28	<0.50	1.34	7.96	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9%	6%	---	---	---	1%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	350	350	<250	350	---	350	---	---	---	<250	---	<250	---	---	---	640	720	63.3	5.48	<0.50	1.37	8.67	---
DUP-3 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	340	340	<250	340	---	340	---	---	---	<250	---	<250	---	---	---	620	700	63.7	5.51	<0.50	1.38	8.64	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	3%	1%	1%	---	---	0%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	2-Mar-16	410	410	<250	410	---	410	---	---	---	<250	---	<250	---	---	---	600	660	46.6	9.52	<0.50	1.67	3.9	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	270	270	<250	270	---	270	---	---	---	<250	---	<250	---	---	---	230	280	8.77	24.3	<0.50	1.63	7.69	---
DUP-7 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	330	370	9.08	21.8	<0.50	1.66	8.07	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	11%	---	---	5%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	320	320	<250	320	---	320	---	---	---	<250	---	<250	---	---	---	400	450	25.1	8.19	<0.50	3.03	7.11	---
DUP-5 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	320	320	620	320	---	320	---	---	---	620	---	620	---	---	---	340	390	26.8	8.09	<0.50	3.08	6.92	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7%	1%	---	2%	3%	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	**330**	**330**	<250	**330**	---	**330**	---	---	---	<250	---	<250	---	---	---	**510**	**560**	**19.2**	**5.73**	<0.50	**2.72**	**28.4**	---
DUP-4 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	**310**	**310**	<250	**310**	---	**310**	---	---	---	<250	---	<250	---	---	---	**480**	**530**	**18.7**	**5.45**	<0.50	**2.57**	**27.9**	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6%	3%	5%	---	6%	2%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	**260**	**260**	<250	**260**	---	**260**	---	---	---	<250	---	<250	---	---	---	**360**	**450**	**13.4**	**34.4**	<0.50	**3.76**	**34.6**	---
DUP-5 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	**270**	**270**	<250	**270**	---	**270**	---	---	---	<250	---	<250	---	---	---	**370**	**460**	**14.1**	**34.2**	<0.50	**3.82**	**34.2**	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5%	1%	---	2%	1%	---
P8-3		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	**270**	**270**	<250	**270**	---	**270**	---	---	---	<250	---	<250	---	---	---	**360**	**430**	**12.2**	**37.5**	<0.50	**4.11**	**17.1**	---
DUP-1 (P8-3)		Porewater EAZ	P8-3	ALS	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	**360**	**420**	**12.9**	**34.4**	<0.50	**3.93**	**14.5**	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6%	9%	---	4%	16%	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	27-Sep-11	**340**	**340**	**570**	**340**	---	**340**	**300**	---	**300**	**570**	---	**570**	**540**	---	**540**	<100	<100	**0.55**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	3-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**3.34**	<0.50	<0.50	<0.50	<0.75	**13.9**
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**3.39**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**5.69**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.97**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**16.7**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Apr-12	**250**	**250**	<250	**250**	**250**	**250**	<250	<250	<250	<250	<250	<250	<250	<250	<250	<200	**280**	**249**	**4.3**	<1.0	**3.7**	**1.4**	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	**330**	**280**	**3.55**	<0.50	**3.59**	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jul-12	**730**	<280 CR	**480 CR**	**730**	<280 CR	<280 CR	**420**	<250 CR	<250 CR	**1,080**	**480 CR**	**480 CR**	**410**	<250 CR	<250 CR	**110**	**300**	**193**	**1.56**	<0.50	**2.17**	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Aug-12	**390**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	<100	**130**	**79.8**	<0.50	<0.50	**0.71**	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-12	**700**	<350 CR	<390 CR	**700**	<350 CR	<350 CR	<250	<250	<250	**780**	<390 CR	<390 CR	<250	<250	<250	<100	<100	**2.10**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**170**	**240**	**71.1**	<0.50	<0.50	**0.60**	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Nov-12	**1,590**	<670 CR	**840 CR**	**1,590**	<670 CR	<670 CR	**760**	<350 CR	<350 CR	**2,260**	**840 CR**	**840 CR**	**870**	<370 CR	<370 CR	<100	<100	**0.59**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Dec-12	**570**	<250 CR	**2,070 CR**	**570**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**2,580**	**2,070 CR**	**2,070 CR**	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	**3.72**
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Jan-13	**500**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**560**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<100	<100	**37.5**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	---	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	25-Feb-13	Well Not Sampled																						
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	**27.7**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	13-Mar-13	**570**	<250 CR	<250 CR	**570**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-May-13	**600**	<350 CR	<250 CR	**600**	<350 CR	<350 CR	**440**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	**160**	**62.8**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Jun-13	**640**	<250 CR	<250 CR	**640**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<100	<100	**54.2**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	16-Sep-13	**580**	<300 CR	**340 CR**	**580**	<300 CR	<300 CR	**270**	<250 CR	<250 CR	**670**	**340 CR**	**340 CR**	**450**	<250 CR	<250 CR	<100	**130**	**32.4**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Dec-13	**660**	<250 CR	**1,230 CR**	**660**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**1,670**	**1,230 CR**	**1,230 CR**	**310**	<250 CR	<250 CR	<100	**110**	**20.5**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-Dec-13	**790**	<300 CR	**350 CR**	**790**	<300 CR	<300 CR	---	---	---	**1,000**	**350 CR**	**350 CR**	---	---	---	---	---	---	---	---	---	---	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Mar-14	**260**	**260**	<250	**260**	---	**260**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**8.47**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Jun-14	**340**	**340**	<250	**340**	---	**340**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**8.55**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-14	**320**	**320**	**290**	**320**	---	**320**	<250	---	<250	**290**	---	**290**	<250	---	<250	<100	<100	**4.76**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	2-Dec-14	**380**	**380**	**670**	**380**	---	**380**	<250	---	<250	**670**	---	**670**	**340**	---	**340**	<100	<100	**2.52**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.60**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.46**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**2.06**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.94**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5S)		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.60**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.91**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5S		Porewater EAZ	P8-7.5	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**2.12**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**12.9**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**4.42**	<0.50	<0.50	<0.50	<0.75	**16**
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**2.50**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.97**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.77**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**14.5**	**0.91**	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**7.83**	**0.56**	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<250	<250	<250	**340**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	**310**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**18.4**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**250**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**20.5**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**33.4**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**420**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**7.34**	<0.50	<0.50	<0.50	<0.75	**9.71**
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**7.01**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Well Not Sampled																						
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.65**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	**170**	**132**	<0.50	<0.50	**0.61**	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	**160**	**87.1**	<0.50	<0.50	**0.56**	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	**500**	<250 CR	**690 CR**	**500**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**1,050**	**690 CR**	**690 CR**	**290**	<250 CR	<250 CR	<100	<100	**1.46**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	**120**	**25.4**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I	+	Porewater	P8-7.5	ALS	BC	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	---	---	---	**740**	---	**740**	---	---	---	**290**	---	**290**	---	---	---	---	---	---	---	---	---	---	---
P8-7.5I-AG	+	Porewater	P8-7.5	Agat	BC	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	**180**	**180**	**150**	**180**	---	**180**	---	---	---	**150**	---	**150**	---	---	---	---	---	---	---	---	---	---	---
P8-7.5I-MA	+	Porewater	P8-7.5	Maxxam	BC	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	**320**	**320**	**400**	**320 J**	---	**320 J**	---	---	---	**400 J**	---	**400 J**	---	---	---	---	---	---	---	---	---	---	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-14	**290**	**290**	<250	**290**	---	**290**	<250	---	<250	<250	---	<250	<250	---	<250	<100	**120**	**24.7**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	**290**	**290**	<250	**290**	---	**290**	<250	---	<250	<250	---	<250	<250	---	<250	**100**	**110**	**13.3**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	**280**	**280**	<250	**280**	---	**280**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.72**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.62**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I-B		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**7.04**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**6.09**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**4.91**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.33**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**5.43**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**5.13**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**3.14**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**3.39**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5I		Porewater	P8-7.5	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.57**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	27-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**24.3**	**2.40**	<0.50	<0.50	**1.28**	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	---	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.33**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**8.18**	**1.16**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**11.6**	**2.06**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**20.0**	**2.13**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**12.7 J**	**2.06**	<0.50	<0.50	<0.75 UJ	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**12.6**	**1.63**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**340 J**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	**29.1**	**3.39**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	**380 J**	<250 CR	<250 CR	**380 J**	<250 CR	<250 CR	<250 UJ	<250	<250	**360 J**	<250 CR	<250 CR	<250 UJ	<250	<250	<100	<100	**0.77**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**6.05**	**0.69 J**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.77 J**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<250	<250	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**1.04**	<0.50	<0.50	<0.50	<0.75	**11**
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.63 J**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	---	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	25-Feb-13	Well Not Sampled																						
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**5.84**	**0.58**	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**29.9**	**1.65 J**	**1.16 J**	**0.57**	**1.67 J**	---
P8-7.5D-A	@	Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**40.0**	**3.32**	<0.50	<0.50	**0.99**	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	<250 UJ	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<100	<100	**31.9**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Dec-13	**490**	<250 CR	**510 CR**	**490**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**980**	**510 CR**	**510 CR**	**390**	<250 CR	<250 CR	<100	<100	**3.44**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.54 J**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**25.0**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**40.3**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14	<250	<250	**260**	<250	---	<250	<250	---	<250	**260**	---	**260**	<250	---	<250	<100	<100	**16.1**	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**5.65**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**4.54**	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22%	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**14.8**	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**16.3**	<0.50	<0.50	<0.50	<0.75	

Parkland Refining (B.C.) Ltd.
\\cabny1fp001\prod\1686\Projects\URS-CHEVRON\60601814 2019 Foreshore Monitoring\500-Deliverables\501 Annual Report\Draft Report\Appendices\Appendix A (needs master table for USB)\
20200214_PreFPTS_Tables A1 to A3_pre 2016 dat

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C_{10}-$<C_{19}$) [1]	Revised EPH$_w$ (C_{10}-$<C_{19}$) [1]	Final EPH$_w$ (C_{10}-$<C_{19}$) [1,6]	EPH$_w$(C_{10}-$<C_{19}$) [1] (Silica gel)	Revised EPH$_w$ (C_{10}-$<C_{19}$) [1] (Silica gel)	Final EPH$_w$ (C_{10}-$<C_{19}$) [1] (Silica gel)	EPH$_w$(C_{19}-C_{32})	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) [6]	EPH$_w$(C_{19}-C_{32}) (Silica gel)	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) (Silica gel)	VPH$_w$	VH$_w$ (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10%	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	38.9	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	32.5	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	18%	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	32.6	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	32.9	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1%	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	13.4	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	37.0	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	37.7	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2%	---	---	---	---	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	14.8	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	19.0	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	110	64.4	<0.50	<0.50	<0.50	<0.75	---
P8-7.5D		Porewater	P8-7.5	ALS	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	27.2	<0.50	<0.50	<0.50	<0.75	---
P8-12S		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Sep-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	0.71	0.75	---
P8-12S		Porewater EAZ	P8-12	ALS	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	Well Not Found																						
P8-12S		Porewater EAZ	P8-12	ALS	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Dec-12	Well Not Found - Assumed Destroyed																						
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	27-Sep-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	6-Oct-11	Well Not Sampled																						
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	3-Nov-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-11	460	<250 CR	<350 CR	460	<250 CR	<250 CR	300	<250 CR	<250 CR	570	<350 CR	<350 CR	370	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.70	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-12	1,400	<570 CR	<610 CR	1,400	<570 CR	<570 CR	1,150	<540 CR	<540 CR	1,440	<610 CR	<610 CR	1,110	<560 CR	<560 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-12	590	<290 CR	<270 CR	590	<290 CR	<290 CR	440	<250 CR	<250 CR	550	<270 CR	<270 CR	400	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Oct-12	530	<250 CR	<250 CR	530	<250 CR	<250 CR	390	<250 CR	<250 CR	560	<250 CR	<250 CR	380	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Nov-12	860	<290 CR	<310 CR	860	<290 CR	<290 CR	620	<250 CR	<250 CR	840	<310 CR	<310 CR	790	<350 CR	<350 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	10-Dec-12	350	<250 CR	<250 CR	350	<250 CR	<250 CR	270	<250 CR	<250 CR	450	<250 CR	<250 CR	260	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-13	720	<330 CR	<340 CR	720	<330 CR	<330 CR	710	<300 CR	<300 CR	680	<340 CR	<340 CR	<3,100	<2,500 CR	<2,500 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-May-13	270	270	390	270	---	270	<250	---	<250	390	---	390	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Jun-13	610	<310 CR	<300 CR	620	<310 CR	<310 CR	500	<250 CR	<250 CR	600	<300 CR	<300 CR	420	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	19-Sep-13	540	<260 CR	<250 CR	540	<260 CR	<260 CR	330	<250 CR	<250 CR	470	<250 CR	<250 CR	300	<250 CR	<250 CR	---	---	---	---	---	---	---	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	9-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	<380	<380	<380	<380	---	<380	<380	---	<380	<380	---	<380	<380	---	<380	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	18-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	2-Dec-14	Incomplete Analysis - Insufficient water in well															<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	Insufficient water for analysis							---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	29-Feb-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12I		Porewater EAZ	P8-12	ALS	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	27-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	14.6	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.71	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	10-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.75	<0.50	<0.50	<0.50	<0.75	8.48
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-13	370	<250 CR	<250 CR	370	<250 CR	<250 CR	250	<250 CR	<250 CR	390	<250 CR	<250 CR	260	<250 CR	<250 CR	<100	<100	2.16	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	8-May-13	400	<250 CR	<250 CR	400	<250 CR	<250 CR	320	<250 CR	<250 CR	340	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D-F	F	Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	8-May-13	330	330	<250	330	330	330	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Jun-13	430	<250 CR	<250 CR	430	<250 CR	<250 CR	330	<250 CR	<250 CR	510	<250 CR	<250 CR	280	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	2-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	9-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12D		Porewater	P8-12	ALS	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-3		Porewater EAZ	P9-3	ALS	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	6-Dec-11	3,510	3,510	2,490	3,520	---	3,520	2,940	---	2,940	2,490	---	2,490	2,400	---	2,400	<3,100	18,500	2,790	416	<10	7,590	4,890	---
P9-3		Porewater EAZ	P9-3	ALS	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	4-Jan-12	1,830	1,830	870	1,840	---	1,840	1,350	---	1,350	870	---	870	810	---	810	<2,100	13,100	3,170	438	<5.0	3,740	4,330	---
P9-3		Porewater EAZ	P9-3	ALS	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	1-Feb-12	1,980	1,980	1,220	1,990	1,990	1,990	1,400	1,400	1,400	1,220	1,220	1,220	790	790	790	<2,900	17,300	2,550	502	<10	7,380	5,170	---
P9-3		Porewater EAZ	P9-3	ALS	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	13-Mar-12	1,530	1,530	640	<1,600	---	<1,600	1,320	---	1,320	640	---	640	620	---	620	<5,000	17,700	2,640	490	<25	8,270	4,680	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Apr-12	14,000	14,000	12,100	14,000	14,000	14,000	9,630	9,630	9,630	12,100	12,100	12,100	8,680	8,680	8,680	11,100	20,100	1,410	650	<10	2,780	4,140	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	1,410	1,410	780	1,410	1,410	1,410	1,010	1,010	1,010	780	780	780	700	700	700	2,300	9,530	1,280	371	<2.5	2,030	3,560	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	850	850	<250	860	860	860	410	410	410	<250	<250	<250	<250	<250	<250	3,300	7,700	871	252	<5.0	394	2,800	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jul-12	1,320	1,030 CR	640 CR	1,320	1,040 CR	1,040 CR	620	340 CR	340 CR	940	640 CR	640 CR	430	<250 CR	<250 CR	3,600	8,400	793	301	<5.0	168	3,500	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	2,010	930 CR	<570 CR	2,010	930 CR	930 CR	1,330	<570 CR	<570 CR	1,140	<570 CR	<570 CR	970	<490 CR	<490 CR	2,100	4,800	451	105	<0.50	30.4	2,050	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1,990	3,930	391	64.4	<2.5	18.7	1,470	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	14-Sep-12	1,120	1,120	270	1,130	---	1,130	300	---	300	270	---	270	<250	---	<250	---	---	---	---	---	---	---	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	1,140	1,140	360	1,140	1,140	1,140	380	380	380	360	360	360	<370	<370	<370	2,480	4,110	323	73.7	<2.5	13.9	1,210	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	6,990	6,990	8,450	6,990	6,990	6,990	2,750	2,750	2,750	8,450	8,450	8,450	3,970	3,970	3,970	2,920	4,350	313	62.6	<1.0	9.6	1,040	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	2,220	1,750 CR	2,080 CR	2,220	1,750 CR	1,750 CR	1,250	730 CR	730 CR	2,590	2,080 CR	2,080 CR	1,440	880 CR	880 CR	1,780	3,030	245	66.4	<1.0	11.0	918	<1.0
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	1,280	1,280	520	1,280	1,280	1,280	620	620	620	520	520	520	400	400	400	2,810	3,800	183	50.2	<1.0	8.0	748	---
P9-3R		Porewater EAZ	P9-3R	ALS	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Well Not Sampled																						
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	43,900	43,900	53,000	43,900	43,900	43,900	39,500	39,500	39,500	53,000	53,000	53,000	47,700	47,700	47,700	6,300	7,900	355	171	<5.0	33.6	1,060	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-May-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2,260	3,390	258	47.3	<2.5	31.4	794	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-May-13	1,970	1,970	950	1,970	---	1,970	1,230	---	1,230	950	---	950	1,150	---	1,150	---	---	---	---	---	---	---	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	2,250	1,760 CR	1,490 CR	2,250	1,760 CR	1,760 CR	1,300	830 CR	830 CR	2,020	1,490 CR	1,490 CR	1,570	1,080 CR	1,080 CR	1,640	2,680	309	142	<1.0	13.1	575	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	3,160	2,570 CR	3,450 CR	3,160	2,570 CR	2,570 CR	1,650	1,190 CR	1,190 CR	4,070	3,450 CR	3,450 CR	2,960	2,460 CR	2,460 CR	1,760	2,670	222	108	<1.0	12.2	569	---
P9-3R	+	Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	4,120	3,520 CR	6,500 CR	4,120	3,520 CR	3,520 CR	2,820	2,320 CR	2,320 CR	7,140	6,500 CR	6,500 CR	5,860	5,330 CR	5,330 CR	1,560	2,230	89.6	119	<0.50	7.33	448	---
P9-3R-AG	+	Porewater EAZ	P9-3R	Agat	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	1,180 J	1,180 J	2,080 J	1,180 J	---	1,180 J	---	---	---	2,080 J	---	2,080 J	---	---	---	---	---	---	---	---	---	---	---
P9-3R-MA	+	Porewater EAZ	P9-3	Maxxam	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	10-Dec-13	2,100	2,100	2,900	2,100	---	2,100	---	---	---	2,900	---	2,900	---	---	---	---	---	---	---	---	---	---	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	1,950	1,950	2,140	1,950	---	1,950	1,230	---	1,230	2,140	---	2,140	1,770	---	1,770	2,200	3,180	127	244	<2.5	12.8	591	---
P9-3R	+	Porewater EAZ	P9-3R	ALS	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	---	---	---	3,820	---	3,820	---	---	---	3,130	---	3,130	---	---	---	---	---	---	---	---	---	---	---
P9-3R-AG	+	Porewater EAZ	P9-3R	Agat	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	2,020	2,020	2,700	2,020	---	2,020	---	---	---	2,700	---	2,700	---	---	---	---	---	---	---	---	---	---	---
P9-3R-MA	+	Porewater EAZ	P9-3R	Maxxam	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	2,900	2,900	5,100	3,000 J	---	3,000 J	---	---	---	5,100 J	---	5,100 J	---	---	---	---	---	---	---	---	---	---	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-14	1,710	1,710	1,910	1,710	---	1,710	950	---	950	1,910	---	1,910	1,410	---	1,410	1,710	2,350	44.4	182	<0.50	8.84	406	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	3,870	3,870	4,920	3,870	---	3,870	2,650	---	2,650	4,920	---	4,920	4,840	---	4,840	4,280	4,840	58.0	109	<2.5	7.6	378	---
P9-3R		Porewater EAZ	P9-3R	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	3-Dec-14	3,180	3,180	3,700	3,180	---	3,180	1,560	---	1,560	3,700	---	3,700	2,880	---	2,880	2,110	2,510	41.6	78.0	<2.5	7.2	271	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	2,250	2,250	3,270	2,250	---	2,250	2,150	---	2,150	3,270	---	3,270	3,590	---	3,590	1,650	1,850	28.2	74.8	<1.0	4.1	92.3	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	1,300	1,300	1,640	1,300	---	1,300	---	---	---	1,640	---	1,640	---	---	---	880	970	21.4	12.0	<0.50	1.67	45.5	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-15	1,630	1,630	2,370	1,630	---	1,630	---	---	---	2,370	---	2,370	---	---	---	950	1,080	40.2	7.88	<0.50	<0.50	80.1	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	1,470	1,470	2,080	1,470	---	1,470	---	---	---	2,080	---	2,080	---	---	---	740	810	42.7	4.85	<0.50	1.53	18.0	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	880	880	630	880	---	880	---	---	---	630	---	630	---	---	---	760	850	15.1	17.2	<0.50	3.08	53.5	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	1,010	1,010	1,110	1,010	---	1,010	---	---	---	1,110	---	1,110	---	---	---	640	670	16.2	5.13	<0.50	1.07	3.74	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	1,780	1,780	2,130	1,780	---	1,780	---	---	---	2,130	---	2,130	---	---	---	890	940	27.8	2.57	<0.50	<0.50	17.4	---
DUP-6 (P9-3R)		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	1,540	1,540	1,880	1,540	---	1,540	---	---	---	1,880	---	1,880	---	---	---	1,030	1,080	29.5	2.64	<0.50	<0.50	18.9	---
QA/QC RPD													Duplicates	14%	14%	12%	14%	---	14%	---	---	---	12%	---	12%	---	---	---	15%	14%	6%	3%	---	---	8%	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	1,290	1,290	1,960	1,290	---	1,290	---	---	---	1,960	---	1,960	---	---	---	760	990	37.7	26.6	<0.50	6.77	154	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	15-Mar-17	1,380	1,380	1,310	1,380	---	1,380	---	---	---	1,310	---	1,310	---	---	---	1,100	1,440	49.1	55	<0.50	19.5	216	---
P9-3R		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	1,170	1,170	1,330	1,170	---	1,170	---	---	---	1,330	---	1,330	---	---	---	220	260	9.96	4.14	<0.50	1.53	21.7	---
DUP-7 (P9-3R)		Porewater EAZ	P9-3R	ALS	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	1,320	1,320	1,550	1,320	---	1,320	---	---	---	1,550	---	1,550	---	---	---	370	410	10.0	4.17	<0.50	1.48	22.0	---
QA/QC RPD													Duplicates	---	---	15%	---	---	---	---	---	---	15%	---	15%	---	---	---	---	---	0%	1%	---	---	1%	---
P9-5		Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	760	290 CR	580 CR	760	290 CR	290 CR	450	<250 CR	<250 CR	1,090	580 CR	580 CR	420	<250 CR	<250 CR	180	230	27.7	3.10	<0.50	3.24	22.9	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}\text{-}<C_{19})$ [1]	Revised EPH_w $(C_{10}\text{-}<C_{19})$ [1]	Final EPH_w $(C_{10}\text{-}<C_{19})$ [1,6]	$EPH_w(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}\text{-}C_{32})$	Revised EPH_w $(C_{19}\text{-}C_{32})$	Final EPH_w $(C_{19}\text{-}C_{32})$ [6]	$EPH_w(C_{19}\text{-}C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}\text{-}C_{32})$	Final EPH_w $(C_{19}\text{-}C_{32})$ (Silica gel)	VPH_w	VH_w $(C_6\text{-}C_{10})$	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]													250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source													DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]													300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	700	<300 CR	<250 CR	700	<300 CR	<300 CR	320	<250 CR	<250 CR	340	<250 CR	<250 CR	<250	<250	<250	910	1,880	766	108	<1.0	1.8	93.1	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	450	<250 CR	480 CR	450	<250 CR	<250 CR	<250	<250	<250	700	480 CR	480 CR	<250	<250	<250	1,290	2,410	845	170	<2.5	<2.5	98.1	<2.5
P9-5	Porewater EAZ	P9-5	ALS	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Well Not Sampled																						
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	14-Mar-13	310	310	<250	310	310	310	<250	<250	<250	<250	<250	<250	<300	<300	<300	870	1,330	185	128	<1.0	2.7	148	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	620	320 CR	<250 CR	620	320 CR	320 CR	350	<250 CR	<250 CR	350	<250 CR	<250 CR	<250	<250	<250	1,930	2,460	241	180	<1.0	8.6	101	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	890	340 CR	<290 CR	890	340 CR	340 CR	470	<250 CR	<250 CR	700	<290 CR	<290 CR	480	<250 CR	<250 CR	650	1,120	247	168	<1.0	2.2	53.2	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	580	580	<250	580	580	580	<250	<250	<250	<250	<250	<250	<250	<250	<250	700	1,120	252	147	<0.50	1.63	20.6	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	380	380	<250	380	---	380	<250	---	<250	<250	---	<250	<250	---	<250	940	1,250	137	156	<0.50	5.84	2.42	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	360	360	290	360	---	360	<250	---	<250	290	---	290	<250	---	<250	540	780	45.7	146	<1.0	13.5	25.6	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	450	450	<250	470	---	470	<250	---	<250	<250	---	<250	<250	---	<250	180	200	14.2	9.71	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	660	660	<250	660	---	660	<250	---	<250	<250	---	<250	<250	---	<250	250	330	64.9	24.0	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	330	350	17.7	<0.50	<0.50	0.54	1.21	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	240	250	3.22	1.45	<0.50	1.52	0.81	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	150	150	4.11	<0.50	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	180	190	12.5	<0.50	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	210	230	20	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P9-5)	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	240	260	22.1	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10%	---	---	---	---	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	140	140	4.84	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P9-5)	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	110	120	4.43	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	9%	---	---	---	---	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	170	170	3.84	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P9-5)	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	120	130	3.56	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8%	---	---	---	---	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	190	190	2.5	<0.50	<0.50	<0.50	<0.75	---
P9-5	Porewater EAZ	P9-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	18.6	<0.50	<0.50	0.55	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.77	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	27-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	49.6	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.16	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	3.70	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jun-12	400	<250 CR	<250 CR	400	<250 CR	<250 CR	310	<250 CR	<250 CR	600	<250 CR	<250 CR	300	<250 CR	<250 CR	<100	<100	1.06	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	3.61	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	5.27	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-12	420	<250 CR	<250 CR	420	<250 CR	<250 CR	<250	<250	<250	480	<250 CR	<250 CR	<250	<250	<250	<100	<100	3.42	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.67	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.84	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	---	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	Well Not Sampled																						
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Jun-13	430	<250 CR	<250 CR	430	<250 CR	<250 CR	370	<250 CR	<250 CR	440	<250 CR	<250 CR	310	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-13	520	<250 CR	<250 CR	520	<250 CR	<250 CR	470	<250 CR	<250 CR	570	<250 CR	<250 CR	450	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.12	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	1.81	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7S	Porewater EAZ	P9-7	ALS	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.79	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	6.66 J	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	29.4	<0.50	<0.50	2.34	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	160	155	1.13	<0.50	9.05	2.93	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	220	164	3.40	<0.50	6.02	4.40	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	15.9	0.82	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.42	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	6.88	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.98	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	0.54 J	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.67	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Well Not Sampled																						
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.63	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.03	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-13	280	<250 CR	<250 CR	280	<250 CR	<250 CR	<250	<250	<250	290	<250 CR	<250 CR	<250	<250	<250	<100	<100	1.84	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	11.1	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.44	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.75	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.60	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.33	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.55	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	2.99	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	0.77	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	1.67	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	3.09	<0.50	<0.50	<0.50	<0.75	---
P9-7I	Porewater	P9-7	ALS	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	6.31	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	6.72	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	7.39	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	12.0	0.55	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	10.2	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	9.24	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	7.11	<0.50	<0.50	<0.50	2.25	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	6.76	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	3.08	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.74	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.56	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.52	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	3.00	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	2.19	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.94 J	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	---	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	25-Feb-13	Well Not Sampled																						
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.93	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	7.67	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	3.63	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13	<250	<250	320 J	<250	<250	<250	<250	<250	<250	320 J	320	320 J	360 J	360	360 J	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	9.73	<0.50	<0.50	<0.50	<0.75	---
P9-7D	Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	37.4	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (μg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date
P9-7D		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-14
P9-7D		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Dec-14
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Mar-15
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Jun-15
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Sep-15
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-Dec-15
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	29-Feb-16
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	18-May-16
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Aug-16
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	23-Nov-16
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Mar-17
P9-7D		Porewater	P9-7	ALS	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	6-Jun-17
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-12
P9.5-5		Porewater EAZ	P9.5-5	ALS	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14
P9.5-5		Porewater EAZ	P9.5-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-15
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	29-Feb-16
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17
P9.5-5		Porewater EAZ	P9.5-5	ALS	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Nov-11
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-11
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	27-Mar-12
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Mar-12
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-12
P10-3S		Porewater EAZ	P10-3	ALS	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Sep-12
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Dec-13
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14
P10-3S		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Feb-16
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-May-16
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Nov-16
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17
P10-3S		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11
P10-3I		Porewater EAZ	P10-3	ALS	---	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Oct-11
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-11
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	27-Mar-12
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-13
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Dec-13
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14
P10-3I	+	Porewater EAZ	P10-3	ALS	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14
P10-3I-AG	+	Porewater EAZ	P10-3	Agat	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14
P10-3I-MA	+	Porewater EAZ	P10-3	Maxxam	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-14
P10-3I		Porewater EAZ	P10-3	ALS	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	29-Feb-16
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Nov-16
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17
P10-3I		Porewater EAZ	P10-3	ALS	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	28-Sep-11
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	7-Dec-11
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	27-Mar-12
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-12
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Sep-12
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Dec-12
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	13-Mar-13
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Jun-13
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	17-Sep-13
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	16-Dec-13
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Mar-14
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Jun-14
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Sep-14
P10-3D		Porewater	P10-3	ALS	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	3-Dec-14
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Mar-15
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	15-Jun-15
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	10-Sep-15
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	7-Dec-15
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	29-Feb-16
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	18-May-16
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	19-Aug-16
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Nov-16
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	14-Mar-17
P10-3D		Porewater	P10-3	ALS	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-17
Culvert Runoff Area													
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	6-Oct-11
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	7-Dec-11
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Dec-11
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	12-Mar-12
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	7-Jun-12
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	14-Sep-12
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	12-Dec-12

Sample ID [4]	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C_{10}-<C_{19}) [1]	Revised EPH$_w$ (C_{10}-<C_{19}) [1]	Final EPH$_w$ (C_{10}-<C_{19}) [1,6]	EPH$_w$(C_{10}-<C_{19}) [1] (Silica gel)	Revised EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	Final EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	EPH$_w$(C_{19}-C_{32})	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) [6]	EPH$_w$(C_{19}-C_{32}) (Silica gel)	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) (Silica gel)	VPH$_w$	VH$_w$ (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]		250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source		DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]		300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P9-7D	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**4.46**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.39**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**4.11**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**28.9**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**28.4**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9-7D	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**23.5**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**3.88**	<0.50	<0.50	<0.50	<0.75	---
P9-7D	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**9.23**	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	5-Jun-12	**350**	**350**	**890**	**350**	**350**	**350**	<250	<250	<250	**890**	**890**	**890**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	11-Sep-12	**1,050**	<470 CR	<500 CR	**1,050**	<470 CR	<470 CR	**730**	<360 CR	<360 CR	**1,180**	<500 CR	<500 CR	**640**	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	25-Feb-13	Well Not Sampled																						
P9.5-5	13-Mar-13	**470**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**640**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	11-Jun-13	**440**	**440**	**1,460**	**440**	**440**	**440**	<250	<250	<250	**1,460**	**1,460**	**1,460**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	10-Dec-13	**450**	**270 CR**	**880 CR**	**450**	**270 CR**	**270 CR**	**290**	<250 CR	<250 CR	**1,070**	**880 CR**	**880 CR**	**350**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	12-Jun-14	**380**	**380**	**1,310**	**380**	---	**380**	<1,100	---	<1,100	**1,310**	---	**1,310**	<1,400	---	<1,400	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	12-Sep-14	**350**	**350**	**810**	**350**	---	**350**	<250	---	<250	**810**	---	**810**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	19-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	19-Aug-16	<250	<250	**640**	<250	---	<250	---	---	---	**640**	---	**640**	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	23-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P9.5-5	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	5-Nov-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	**280**	---	**280**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	7-Dec-11	<250	<250	**290**	<250	<250	<250	<250	<250	<250	**290**	**290**	**290**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.80	<0.78	---
P10-3S	27-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	29-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
P10-3S	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	13-Sep-12	Well Not Sampled - Insufficient Water for Analysis																						
P10-3S	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	13-Mar-13	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	11-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	17-Sep-13	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	16-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3S	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	7-Oct-11	Well Not Sampled																						
P10-3I	7-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	27-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Sep-12	<250	<250	**370**	<250	<250	<250	<250	<250	<250	**370**	**370**	**370**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	13-Mar-13	**460**	<250 CR	**290 CR**	**460**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**740**	**290 CR**	**290 CR**	**290**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Jun-13	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	16-Dec-13	**740**	<370 CR	<400 CR	**740**	<370 CR	<370 CR	**590**	<300 CR	<300 CR	**1,000**	<400 CR	<400 CR	**630**	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P10-3I-AG	11-Mar-14	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P10-3I-MA	11-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P10-3I	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3I	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	28-Sep-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	7-Dec-11	**430**	<250 CR	**970 CR**	**430**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**1,160**	**970 CR**	**970 CR**	**600**	**420 CR**	**420 CR**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	27-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	12-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	13-Mar-13	**370**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	11-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	16-Dec-13	**480**	<250 CR	<260 CR	**480**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**510**	<260 CR	<260 CR	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	11-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	3-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	12-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	18-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	19-Aug-16	<250	<250	**420**	<250	---	<250	---	---	---	**420**	---	**420**	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P10-3D	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
Culvert Runoff Area																								
P14-3S	6-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S	7-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S	9-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P14-3S	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	---	---	---	---	---	---	---	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3S		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	6-Oct-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.80	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3I		Porewater EAZ	P14-3	ALS	---	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	10-Dec-12	Well Destroyed																						
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	6-Oct-11	<250	<250	**400**	<250	<250	<250	<250	<250	<250	**400**	**400**	**400**	**280**	**280**	**280**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Dec-11	**360**	<250 CR	**330 CR**	**360**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**580**	**330 CR**	**330 CR**	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<1.0	<0.78	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	12-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-3D		Porewater EAZ	P14-3	ALS	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Sep-12	**580**	<290 CR	<290 CR	**580**	<290 CR	<290 CR	**510**	<250 CR	<250 CR	**590**	<290 CR	<290 CR	**500**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Oct-12	**490**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**540**	<270 CR	<270 CR	**490**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Nov-12	**730**	<370 CR	<370 CR	**730**	<370 CR	<370 CR	**710**	<360 CR	<360 CR	**730**	<370 CR	<370 CR	**590**	<300 CR	<300 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Dec-12	**350**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	**400**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Jan-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	15-Mar-13	**390**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Jun-13	**510**	<250 CR	<250 CR	**510**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**630**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	16-Dec-13	**790**	<400 CR	<450 CR	**790**	<400 CR	<400 CR	**680**	<340 CR	<340 CR	**910**	<450 CR	<450 CR	**690**	<340 CR	<340 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12I		Porewater	P14-12	ALS	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Dec-11	**750**	<320 CR	<340 CR	**750**	<320 CR	<320 CR	**620**	<270 CR	<270 CR	**990**	<340 CR	<340 CR	**630**	<280 CR	<280 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Jun-12	**2,150**	<780 CR	**1,440 CR**	**2,150**	<780 CR	<780 CR	**1,180**	<500 CR	<500 CR	**3,100**	**1,440 CR**	**1,440 CR**	**1,110**	<530 CR	<530 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	**630**	<310 CR	<330 CR	**630**	<310 CR	<310 CR	**550**	<270 CR	<270 CR	**660**	<330 CR	<330 CR	**540**	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	**450**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**460**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-13	**360**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-May-13	<1,600	<1,600	<1,600	<1,600	---	<1,600	<1,600	---	<1,600	<1,600	---	<1,600	<1,600	---	<1,600	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-May-13	**850**	<350 CR	<350 CR	**850**	<350 CR	<350 CR	**410**	<330 CR	<330 CR	**890**	<350 CR	<350 CR	<330	<330	<330	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	**470**	<250 CR	<260 CR	**470**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**560**	<260 CR	<260 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<250	<250	<250	**330**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-12D		Porewater	P14-12	ALS	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.86**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.5	<1.0	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.19**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.88**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.51**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.74**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.70**	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12I		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	**380 J**	<250 CR	<250 CR	**380 J**	<250 CR	<250 CR	**330 J**	<250 CR	<250 CR	**380 J**	<250 CR	<250 CR	**330 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**320 J**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	**350**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14R-12D		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Jun-12	**450**	<250 CR	**1,160 CR**	**450**	<250 CR	<250 CR	---	---	---	**1,430**	**1,160 CR**	**1,160 CR**	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Sep-12	**630**	<310 CR	<340 CR	**630**	<310 CR	<310 CR	**480**	<250 CR	<250 CR	**740**	<340 CR	<340 CR	**460**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Nov-12	Well Not Sampled - tide too high																						
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Dec-12	**350**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<300	<300	<300	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Jun-13	**380**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	17-Sep-13	**930**	<460 CR	<520 CR	**930**	<460 CR	<460 CR	**730**	<360 CR	<360 CR	**1,040**	<520 CR	<520 CR	**710**	<350 CR	<350 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	16-Dec-13	**610**	<310 CR	<340 CR	**610**	<310 CR	<310 CR	**460**	<250 CR	<250 CR	**790**	<340 CR	<340 CR	**470**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17S		Porewater EAZ	P14-17	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	**580**	<250 CR	**860 CR**	**580**	<250 CR	<250 CR	**360 J**	<250 CR	<250 UJ,CR	**1,280**	**860 CR**	**860 CR**	**300 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	**380**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	<250	<250	<250	**370**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	---	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Nov-12	Well Not Sampled - tide too high																						
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	**550**	<270 CR	<270 CR	**550**	<270 CR	<270 CR	**360**	<250 CR	<250 CR	**550**	<270 CR	<270 CR	**280**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	**480**	**480**	**520**	**480**	---	**480**	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	**590 J**	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	**590 J**	---	**590 J**	**300 J**	---	**300 J**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I	+	Porewater	P14-17	ALS	BC	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	**390**	---	**390**	---	---	---	---	---	---	---	---	---	---	---
P14-17I-AG	+	Porewater	P14-17	Agat	BC	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	**179**	**179**	**550**	**180**	---	**180**	---	---	---	**550**	---	**550**	---	---	---	---	---	---	---	---	---	---	---
P14-17I-MA	+	Porewater	P14-17	Maxxam	BC	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<200	<200	**400**	<200 UJ	---	<200 UJ	---	---	---	**400 J**	---	**400 J**	---	---	---	---	---	---	---	---	---	---	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17I		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	<250	<250	**730**	<250	<250	<250	<250	<250	<250	**730**	**730**	**730**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<400	<400	<400	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	<250	<250	**280**	<250	<250	<250	<250	<250	<250	**290**	**290**	**290**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D	+	Porewater	P14-17	ALS	BC	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P14-17D-AG	+	Porewater	P14-17	Agat	BC	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<100	<100	**120**	<100	---	<100	---	---	---	**120**	---	**120**	---	---	---	---	---	---	---	---	---	---	---
P14-17D-MA	+	Porewater	P14-17	Maxxam	BC	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<200	<200	**230**	<200 UJ	---	<200 UJ	---	---	---	**230 J**	---	**230 J**	---	---	---	---	---	---	---	---	---	---	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14-17D		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	13-Sep-12	Well Not Sampled - Dry																						
P14.5-12S		Porewater EAZ	P14.5-12	ALS	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Dec-12	Well Not Sampled - Insufficient Water for Analysis																						
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Jun-13	**250**	<250 CR	<250	**250**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	16-Dec-13	**330**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**460**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	10-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12S		Porewater EAZ	P14.5-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	11-Sep-14	<250	<250	**350**	<250	---	<250	<250	---	<250	**350**	---	**350**	**280**	---	**280**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Sep-12	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**280**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Oct-12	**440**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Nov-12	**860**	<430 CR	<440 CR	**860**	<430 CR	<430 CR	**840**	<420 CR	<420 CR	**890**	<440 CR	<440 CR	**760**	<380 CR	<380 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Dec-12	**400**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jan-13	**390 J**	<250 CR	<250 CR	**390 J**	<250 CR	<250 CR	**350 J**	<250 CR	<250 CR	**450 J**	<250 CR	<250 CR	**330 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13	**370**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	23-May-13	**370**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	16-Dec-13	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12I		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Jun-12	**270**	**270**	**1,350**	**270**	**270**	**270**	<250	<250	<250	**1,350**	**1,350**	**1,350**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D	+	Porewater	P14.5-12	ALS	BC	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P14.5-12D-AG	+	Porewater	P14.5-12	Agat	BC	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<100	<100	<130	<100	---	<100	---	---	---	**130**	---	**130**	---	---	---	---	---	---	---	---	---	---	---
P14.5-12D-MA	+	Porewater	P14.5-12	Maxxam	BC	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<200	<200	<200	<200 UJ	---	<200 UJ	---	---	---	<200 UJ	---	<200 UJ	---	---	---	---	---	---	---	---	---	---	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14.5-12D		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Jun-13	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Dec-13	**410**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	<450	<450	<450	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	**560 J**	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	**560 J**	---	**560 J**	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12S		Porewater EAZ	P15-12	ALS	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	**310**	---	**310**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12I		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P15-12D		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	**250**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	<250	<250	<250	**290**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	**470**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**650**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3S		Porewater EAZ	P17.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	**350**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-13	**430**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3I		Porewater	P17.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.72**	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	**250**	**250**	<250	**250**	**250**	**250**	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.66**	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.93**	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D	+	Porewater	P17.5-3	ALS	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	---	---	---	**310 J**	---	**310 J**	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P17.5-3D-AG	+	Porewater	P17.5-3	Agat	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	**160**	**160**	**110 J**	**160**	---	**160**	---	---	---	**110 J**	---	**110 J**	---	---	---	---	---	---	---	---	---	---	---
P17.5-3D-MA	+	Porewater	P17.5-3	Maxxam	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	**240**	**240**	<200	**240 J**	---	**240 J**	---	---	---	<200 UJ	---	<200 UJ	---	---	---	---	---	---	---	---	---	---	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P17.5-3D		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-13	<250	<250	**680**	<250	---	<250	<250	---	<250	**680**	---	**680**	**560**	---	**560**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13	**1,060**	<470 CR	<600 CR	**1,060**	<470 CR	<470 CR	**780**	<390 CR	<390 CR	**1,600**	<600 CR	<600 CR	**1,380**	<490 CR	<490 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-May-13	**280**	**280**	**780**	**280**	---	**280**	<250	---	<250	**780**	---	**780**	**280**	---	**280**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Sep-13	<250	<250	**320**	<250	<250	<250	<250	<250	<250	**320**	**320**	**320**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	13-Dec-13	**270**	<250 CR	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-14	<250	<250	**280**	<250	---	<250	<250	---	<250	**280**	---	**280**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	8-Sep-14	**280**	**280**	<250	**280**	---	**280**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S-A		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	1-Dec-14	**310**	**310**	<250	**310**	---	**310**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S-B	"	Porewater EAZ	P18-4.5	ALS	Traditional	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	4-Dec-14	**400**	**400**	<250	**400**	---	**400**	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

Parkland Refining (B.C.) Ltd.
\\cabny1fp001\prod\1686\Projects\URS-CHEVRON\60601814 2019 Foreshore Monitoring\500-Deliverables\501 Annual Report\Draft Report\Appendices\Appendix A (needs master table for USB)\
20200214_PreFPTS_Tables A1 to A3_pre 2016 dat

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C_{10}-<C_{19}) [1]	Revised EPH$_w$ (C_{10}-<C_{19}) [1]	Final EPH$_w$ (C_{10}-<C_{19}) [1,6]	EPH$_w$(C_{10}-<C_{19}) [1] (Silica gel)	Revised EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	Final EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	EPH$_w$(C_{19}-C_{32})	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) [6]	EPH$_w$(C_{19}-C_{32}) (Silica gel)	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) (Silica gel)	VPH$_w$	VH$_w$ (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	3-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	20-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5S		Porewater EAZ	P18-4.5	ALS	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	22-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	18-Sep-13	**260**	**260**	<250	**260**	**260**	**260**	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I	+	Porewater	P18-4.5	ALS	BC	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P18-4.5I-AG	+	Porewater	P18-4.5	Agat	BC	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	**170**	**170**	**200**	**170**	---	**170**	---	---	---	**200**	---	**200**	---	---	---	---	---	---	---	---	---	---	---
P18-4.5I-MA	+	Porewater	P18-4.5	Maxxam	BC	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	**270**	**270**	**290**	**270 J**	---	**270 J**	---	---	---	**290 J**	---	**290 J**	---	---	---	---	---	---	---	---	---	---	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5I		Porewater	P18-4.5	ALS	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<250 UJ	---	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D	+	Porewater	P18-4.5	ALS	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P18-4.5D-AG	+	Porewater	P18-4.5	Agat	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	**110**	**110**	**110**	**120**	---	**120**	---	---	---	**110**	---	**110**	---	---	---	---	---	---	---	---	---	---	---
P18-4.5D-MA	+	Porewater	P18-4.5	Maxxam	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	**200**	**200**	**240**	**200 J**	---	**200 J**	---	---	---	**240 J**	---	**240 J**	---	---	---	---	---	---	---	---	---	---	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18-4.5D		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	**310**	<250 CR	**950 CR**	**310**	<250 CR	<250 CR	<250	<250	<250	**1,150**	**950 CR**	**950 CR**	**770**	**590 CR**	**590 CR**	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3S		Porewater EAZ	P18.5-3	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	13-Dec-13	<250	<250	**310 CR**	<250	<250	<250	<250	<250	<250	**480**	**310 CR**	**310 CR**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3I		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	**120**	**120**	<0.50	<0.50	<0.50	<0.50	<0.75	---
P18.5-3D		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	**280**	<250	---	<250	<250	---	<250	**280**	---	**280**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
Reference Area																																				
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Dec-11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Feb-12	**390**	<250 CR	**480 CR**	**390**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**770**	**480 CR**	**480 CR**	**380**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Apr-12	<500	<500	<500	<500	<500	<500	---	---	---	<500	<500	<500	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.60	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jul-12	<250	<250	**260**	<250	<250	<250	<250	<250	<250	**260**	**260**	**260**	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Nov-12	**330**	<250 CR	**330 CR**	**330**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**640**	**330 CR**	**330 CR**	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jan-13	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	**290**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-13	<250	<250	**340**	<250	---	<250	<250	---	<250	**340**	---	**340**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	23-May-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	19-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	12-Dec-13	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	14-Mar-14	<500	<500	<250	<500	---	<500	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8S		Porewater EAZ	PR2-8	ALS	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	2-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Apr-12	<500	<500	<500	<500	<500	<500	<700	<700	<700	<500	<500	<500	<700	<700	<700	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	6-Jul-12	**530**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	3-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Nov-12	**780**	<380 CR	<410 CR	**780**	<380 CR	<380 CR	**500**	<250 CR	<250 CR	**910**	<410 CR	<410 CR	**450**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-12	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Mar-13	**870**	<440 CR	<380 CR	**870**	<440 CR	<440 CR	**670**	<330 CR	<330 CR	**760**	<380 CR	<380 CR	**640**	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Jun-13	**810**	<360 CR	<390 CR	**810**	<360 CR	<360 CR	**630**	<300 CR	<300 CR	**870**	<390 CR	<390 CR	**590**	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I	+	Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<250	<250	**280 CR**	<250	<250	<250	<250	<250	<250	**430**	**280 CR**	**280 CR**	<250	<250	<250	---	---	---	---	---	---	---	---
PR2-8I-AG	+	Porewater	PR2-8	Agat	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<100	<100	**300**	<100	---	<100	---	---	---	**300**	---	**300**	---	---	---	---	---	---	---	---	---	---	---
PR2-8I-MA	+	Porewater	PR2-8	Maxxam	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	17-Dec-13	<250	<250	**260**	<250	<250	<250	---	---	---	**260**	**260**	**260**	---	---	---	---	---	---	---	---	---	---	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I	+	Porewater	PR2-8	ALS	BC	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
PR2-8I-AG	+	Porewater	PR2-8	Agat	BC	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<100	<100	**260**	<100	---	<100	---	---	---	**260**	---	**260**	---	---	---	---	---	---	---	---	---	---	---
PR2-8I-MA	+	Porewater	PR2-8	Maxxam	BC	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<200	<200	**230**	<200	---	<200	---	---	---	**230**	---	**230**	---	---	---	---	---	---	---	---	---	---	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jun-14	<250	<250	**390**	<250	---	<250	<250	---	<250	**390**	---	**390**	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8I		Porewater	PR2-8	ALS	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	2-Feb-12	**920**	<390 CR	<410 CR	**920**	<390 CR	<390 CR	**840**	<380 CR	<380 CR	**1,130**	<410 CR	<410 CR	**830**	<410 CR	<410 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	**0.63 J**	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	3-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D-F	F	Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	---	---	---	---	---	---	---	---
PR2-8D U	&	Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

Parkland Refining (B.C.) Ltd.
\\cabny1fp001\prod\1686\Projects\URS-CHEVRON\60601814 2019 Foreshore Monitoring\500-Deliverables\501 Annual Report\Draft Report\Appendices\Appendix A (needs master table for USB)\
20200214_PreFPTS_Tables A1 to A3_pre 2016 dat

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ (Silica gel) [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D	+	Porewater	PR2-8	ALS	BC	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
PR2-8D-AG	+	Porewater	PR2-8	Agat	BC	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<100	<100	**200**	<100	---	<100	---	---	---	**200**	---	**200**	---	---	---	---	---	---	---	---	---	---	---
PR2-8D-MA	+	Porewater	PR2-8	Maxxam	BC	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<200	<200	**200**	<200	---	<200	---	---	---	**200**	---	**200**	---	---	---	---	---	---	---	---	---	---	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8D		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**300**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5S		Porewater EAZ	PEC-5	ALS	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5I		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Sep-12	---	---	---	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D	+	Porewater	PEC-5	ALS	BC	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
PEC-5D-AG	+	Porewater	PEC-5	Agat	BC	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	<100	<100	**200**	<100	---	<100	---	---	---	**200**	---	**200**	---	---	---	---	---	---	---	---	---	---	---
PEC-5D-MA	+	Porewater	PEC-5	Maxxam	BC	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-5D		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
Seawater																																				
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	6-Jun-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	18-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Nov-12	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	**650 J**	<250 CR	<250 CR	**650 J**	<250 CR	<250 CR	**560 J**	<250 CR	<250 CR	**720 J**	<250 CR	<250 CR	**670 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	24-Jun-13	**500**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-O		Surface Water	P3-3	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	**260**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	**480**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**530**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	**870**	<430 CR	<420 CR	**870**	<430 CR	<430 CR	**350**	<250 CR	<250 CR	**840**	<420 CR	<420 CR	**410**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO	+	Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO-AG	+	Surface Water	P3-3	Agat	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<100 UJ	<100 UJ	<100 UJ	<100 UJ	---	<100 UJ	---	---	---	<100 UJ	---	<100 UJ	---	---	---	---	---	---	---	---	---	---	---
P3-3-NBO-MA	+	Surface Water	P3-3	Maxxam	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO	+	Surface Water	P3-3	ALS	BC	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P3-3-NBO-AG	+	Surface Water	P3-3	Agat	BC	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	**160**	**160**	**110**	**160**	---	**160**	---	---	---	**110**	---	**110**	---	---	---	---	---	---	---	---	---	---	---
P3-3-NBO-MA	+	Surface Water	P3-3	Maxxam	BC	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-3-NBO		Surface Water	P3-3	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-4-O		Surface Water	P3-4	ALS	DCM	NA	WB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-4-NBO		Surface Water	P3-4	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	18-Sep-12	**250**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-12	**420**	<250 CR	<340 CR	**420**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**840**	<340 CR	<340 CR	**330**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	**370**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	24-Jun-13	**820**	<390 CR	<410 CR	**820**	<390 CR	<390 CR	**580**	<290 CR	<290 CR	**870**	<410 CR	<410 CR	**540**	<270 CR	<270 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	**0.52**	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P3-12-O)		Surface water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P3-12-O)		Surface water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P3-12-O)		Surface water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P3-12-O)		Surface water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O		Surface Water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P3-12-O)		Surface water	P3-12	ALS	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	**310**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	**320**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	<250 UJ	<250 UJ	<250 UJ	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P3-12-NBO)		Surface water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P3-12-NBO		Surface Water	P3-12	ALS	Hexane	NA	WB	NBO	NBO	NBO	---	---	8-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**2.27**	<0.50	<0.50	**3.71**	**3.82**	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	6-Jun-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	---	NA	EB	SW	SW	SW	---	---	10-Dec-12	Well Not Sampled																						
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**360**	<250 CR	<250 CR	**260**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	**600**	<300 CR	<310 CR	**600**	<300 CR	<300 CR	**490**	<250 CR	<250 CR	**660**	<310 CR	<310 CR	**540**	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	**780**	<390 CR	<380 CR	**780**	<390 CR	<390 CR	**560**	<280 CR	<280 CR	**750**	<380 CR	<380 CR	**470**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-O		Surface Water	P6-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**17.4**	**1.82**	<0.50	**10.0**	**12.7**	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	**520**	<260 CR	<250 CR	**520**	<260 CR	<260 CR	**490**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	---	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	Well Not Sampled																						
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	**360**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	**530**	<270 CR	<250 CR	**530**	<270 CR	<270 CR	**420**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	**260 J**	<250 UJ,CR	<250 UJ	**260 J**	<250 CR	<250 UJ,CR	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-3-NBO		Surface Water	P6-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8-O		Surface Water	P6-8	ALS	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8-NBO		Surface Water	P6-8	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8-NBO		Surface Water	P6-8	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	**340**	<250 CR	<250 CR	**340**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Nov-12	**330**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	10-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	**420**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	**550**	<280 CR	<270 CR	**550**	<280 CR	<280 CR	**440**	<250 CR	<250 CR	**540**	<270 CR	<270 CR	**390**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O	+	Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O-AG	+	Surface Water	P6-13	Agat	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<100 UJ	<100 UJ	<100 UJ	<100 UJ	---	<100 UJ	---	---	---	<100 UJ	---	<100 UJ	---	---	---	---	---	---	---	---	---	---	---
P6-12-O-MA	+	Surface Water	P6-12	Maxxam	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	<250	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O	+	Surface Water	P6-12	ALS	BC	NA	EB	SW	SW	SW	---	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
P6-12-O-AG	+	Surface Water	P6-12	Agat	BC	NA	EB	SW	SW	SW	---	---	14-Mar-14	**150**	**150**	<100	**150**	---	**150**	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
P6-12-O-MA	+	Surface Water	P6-12	Maxxam	BC	NA	EB	SW	SW	SW	---	---	14-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-O		Surface Water	P6-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	**490**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**480**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	**330**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**290**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	**450**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-12-NBO		Surface Water	P6-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	**130**	**16.2**	**3.56**	<0.50	**39.9**	**29.3**	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	6-Jun-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	---	NA	EB	SW	SW	SW	---	---	10-Dec-12	Well Not Sampled																						
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	**440**	<250 CR	<250 CR	**440**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	**510**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	**460**	<250 CR	<250 CR	**460**	<250 CR	<250 CR	**410**	<250 CR	<250 CR	**450**	<250 CR	<250 CR	**320**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-O		Surface Water	P8-3	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	**110**	**14.3**	**2.04**	<0.50	**17.9**	**22.5**	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	**470**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	---	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	Well Not Sampled																						
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	**370**	<250 CR	<260 CR	**370**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**520**	<260 CR	<260 CR	**390**	<250 CR	<250 CR	<100	<100	**0.50**	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	**380**	<250 CR	<250 CR	**380**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	**900**	<430 CR	<450 CR	**900**	<430 CR	<430 CR	**670**	<330 CR	<330 CR	**1,000**	<450 CR	<450 CR	**670**	<330 CR	<330 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-3-NBO		Surface Water	P8-3	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-8-O		Surface Water	P8-8	ALS	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.60	<0.75	---
P8-8-NBO		Surface Water	P8-8	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-8-NBO		Surface Water	P8-8	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<250	<250	<250	<250	<250	<250	**250**	<250 CR	<250 CR	<250	<250	<250	**290**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Nov-12	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	**280**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	10-Dec-12	**390**	<250 CR	<250 CR	**390**	<250 CR	<250 CR	**330**	<250 CR	<250 CR	**470**	<250 CR	<250 CR	**350**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	**420**	<250 CR	<250 CR	**420**	<250 CR	<250 CR	**370**	<250 CR	<250 CR	**490**	<250 CR	<250 CR	**400**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	**690**	<350 CR	<320 CR	**690**	<350 CR	<350 CR	**620**	<310 CR	<310 CR	**640**	<320 CR	<320 CR	**510**	<260 CR	<260 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-12-O)		Surface water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P8-12-O)		Surface water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P8-12-O)		Surface water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-O		Surface Water	P8-12	ALS	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	**550**	<270 CR	<280 CR	**550**	<270 CR	<270 CR	**480**	<250 CR	<250 CR	**550**	<280 CR	<280 CR	**440**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	**270**	<250 CR	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-12-NBO)		Surface water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	
QA/QC RPD													**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P8-12-NBO		Surface Water	P8-12	ALS	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P14C-SW		Surface Run-off	P14C	ALS	DCM	NA	CL	SW	SW	SW	---	---	18-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PEC-SW		Surface Run-off	PEC	ALS	DCM	NA	RL	SW	SW	SW	---	---	18-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	6-Jun-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	18-Sep-12	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Nov-12	**280**	<250 CR	<250 CR	**280**	<250 CR	<250 CR	<250	<250	<250	**260**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	9-Jan-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	**270**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}$-$<C_{19})$ [1]	Revised EPH_w (C_{10}-$<C_{19}$) [1]	Final EPH_w (C_{10}-$<C_{19}$) [1,6]	$EPH_w(C_{10}$-$<C_{19})$ [1] (Silica gel)	Revised EPH_w (C_{10}-$<C_{19}$) [1] (Silica gel)	Final EPH_w (C_{10}-$<C_{19}$) [1] (Silica gel)	$EPH_w(C_{19}$-$C_{32})$	Revised EPH_w (C_{19}-C_{32})	Final EPH_w (C_{19}-C_{32}) [6]	$EPH_w(C_{19}$-$C_{32})$ (Silica gel)	Revised EPH_w (C_{19}-C_{32})	Final EPH_w (C_{19}-C_{32}) (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	11-Mar-13	340	<250 CR	<250 CR	340	<250 CR	<250 CR	340	<250 CR	<250 CR	360	<250 CR	<250 CR	340	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	24-Jun-13	<250	<250	<250 CR	<250	<250	<250	<250	<250	<250	260	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O	+	Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O-AG	+	Surface Water	PR2-3	Agat	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<100 UJ	<100 UJ	<100 UJ	<100 UJ	---	<100 UJ	---	---	---	<100 UJ	---	<100 UJ	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O-MA	+	Surface Water	PR2-3	Maxxam	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O	+	Surface Water	PR2-3	ALS	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O-AG	+	Surface Water	PR2-3	Agat	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	150	150	<100	150	---	150	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O-MA	+	Surface Water	PR2-3	Maxxam	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	---	---	<250	<250	---	<250	---	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-O		Surface Water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	6-Jun-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	440	<250 CR	<250 CR	440	<250 CR	<250 CR	480	<250 CR	<250 CR	440	<250 CR	<250 CR	430	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	350	<250 CR	<250 CR	350	<250 CR	<250 CR	280	<250 CR	<250 CR	340	<250 CR	<250 CR	270	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	250	<250 CR	<250	250	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	450	<250 CR	<250 CR	450	<250 CR	<250 CR	450	<250 CR	<250 CR	500	<250 CR	<250 CR	510	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	490	<250 CR	<250 CR	490	<250 CR	<250 CR	390	<250 CR	<250 CR	510	<250 CR	<250 CR	340	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-3-NBO		Surface Water	PR2-3	ALS	---	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	Sample not shipped to laboratory																						
PR2-3-NBO		Surface Water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	
PR2-8-O		Surface Water	PR2-8	ALS	DCM	NA	RL	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100 UJ	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-8-NBO		Surface Water	PR2-8	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	18-Sep-12	280	<250 CR	<250 CR	280	<250 CR	<250 CR	280	<250 CR	<250 CR	290	<250 CR	<250 CR	260	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Nov-12	310	<250 CR	<250 CR	310	<250 CR	<250 CR	260	<250 CR	<250 CR	300	<250 CR	<250 CR	260	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-12	370	<250 CR	<250 CR	370	<250 CR	<250 CR	<250	<250	<250	490	<250 CR	<250 CR	250	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	9-Jan-13	280	<250 CR	<250 CR	280	<250 CR	<250 CR	<250	<250	<250	260	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	11-Mar-13	390	<250 CR	<250 CR	390	<250 CR	<250 CR	310	<250 CR	<250 CR	420	<250 CR	<250 CR	350	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	24-Jun-13	910	<450 CR	<480 CR	910	<450 CR	<450 CR	660	<330 CR	<330 CR	1,030	<480 CR	<480 CR	650	<320 CR	<320 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-O		Surface Water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	330	<250 CR	<250 CR	330	<250 CR	<250 CR	270	<250 CR	<250 CR	330	<250 CR	<250 CR	250	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	530	<250 CR	<260 CR	530	<250 CR	<250 CR	470	<250 CR	<250 CR	600	<260 CR	<260 CR	490	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	930	<460 CR	<460 CR	930	<460 CR	<460 CR	700	<350 CR	<350 CR	920	<460 CR	<460 CR	580	<290 CR	<290 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
PR2-12-NBO		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RAC-SW		Surface Run-off	RAC	ALS	DCM	NA	RL	SW	SW	SW	---	---	18-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
Tidal Cycle Sampling																																				
P5-3D-A		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P5-3D-B		Porewater	P5-3	ALS	Traditional	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	4.89	<0.50	<0.50	<0.50	<0.75	---
P5-3D-C		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	5.85	<0.50	<0.50	<0.50	<0.75	---
P5-3D-D		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	7.63	<0.50	<0.50	<0.50	<0.75	---
P5-3D-E		Porewater	P5-3	ALS	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	8.47	<0.50	<0.50	<0.50	<0.75	---
P6-8S-A		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	620	<250 CR	<250 CR	620	<250 CR	<250 CR	360	<250 CR	<250 CR	440	<250 CR	<250 CR	260	<250 CR	<250 CR	260	280	14.8	<0.50	<0.50	<0.50	<0.75	---
P6-8S-B		Porewater EAZ	P6-8	ALS	Traditional	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	630	<300 CR	<250 CR	630	<300 CR	<300 CR	370	<250 CR	<250 CR	560	<250 CR	<250 CR	280	<250 CR	<250 CR	290	300	11.8	<0.50	<0.50	<0.50	<0.75	---
P6-8S-C		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	1,210	<450 CR	<480 CR	1,210	<450 CR	<450 CR	880	<420 CR	<420 CR	1,140	<480 CR	<480 CR	720	<360 CR	<360 CR	300	320	13.0	<0.50	<0.50	<0.50	<0.75	---
P6-8S-D		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	1,110	<450 CR	<440 CR	1,110	<450 CR	<450 CR	820	<410 CR	<410 CR	890	<440 CR	<440 CR	670	<330 CR	<330 CR	330	350	13.1	<0.50	<0.50	<0.50	<0.75	---
P6-8S-E		Porewater EAZ	P6-8	ALS	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	360	<250 CR	<250	360	<250 CR	<250 CR	<250	<250	<250	<250	<250	<250	<250	<250	<250	340	350	15.1	<0.50	<0.50	<0.50	<0.75	---
P6-8D-A		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
P6-8D-B		Porewater	P6-8	ALS	Traditional	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.88	<0.50	<0.50	<0.50	<0.75	---
P6-8D-C		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.03	<0.50	<0.50	<0.50	<0.75	---
P6-8D-D		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.73	<0.50	<0.50	<0.50	<0.75	---
P6-8D-E		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.50	<0.50	<0.50	<0.50	<0.75	---
P7-3-A		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	1,160	770 CR	<250 CR	1,170	780 CR	780 CR	670	300 CR	300 CR	620	<250 CR	<250 CR	530	<250 CR	<250 CR	1,530	2,440	322	112	<1.0	3.7	468	---
P7-3-B		Porewater EAZ	P7-3	ALS	Traditional	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	1,400	1,050 CR	440 CR	1,400	1,050 CR	1,050 CR	810	390 CR	390 CR	800	440 CR	440 CR	600	<250 CR	<250 CR	1,540	2,470	352	124	<1.0	3.9	455	---
P7-3-C		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	2,360	1,030 CR	<570 CR	2,360	1,040 CR	1,040 CR	1,340	<540 CR	<540 CR	1,130	<570 CR	<570 CR	840	<420 CR	<420 CR	1,550	2,350	313	119	<1.0	3.4	366	---
P7-3-D		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	2,390	1,390 CR	<530 CR	2,400	1,400 CR	1,400 CR	1,370	<480 CR	<480 CR	1,060	<530 CR	<530 CR	830	<410 CR	<410 CR	1,450	2,300	325	124	<1.0	3.5	396	---
P7-3-E		Porewater EAZ	P7-3	ALS	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	1,600	1,070 CR	<280 CR	1,600	1,070 CR	1,070 CR	780	420 CR	420 CR	790	<280 CR	<280 CR	530	<250 CR	<250 CR	1,560	2,400	384	126	<1.0	3.4	323	---
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	21.4 J	3.37	<0.50	<0.50	1.00 J	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	13.6	1.66	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<100	<100	27.7	3.73	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	480 J	<250 CR	<250 CR	480 J	<250 CR	<250 CR	380 J	<250 CR	<250 CR	460 J	<250 CR	<250 CR	340 J	<250 CR	<250 CR	<100	<100	0.83	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.01	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.78	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	<250 UJ	<250	<250 UJ,CR	<250 UJ	<250	<250	<250	<250	<250	500 J	<250 CR	<250 UJ,CR	<250 UJ	<250	<250	<100	<100	1.58	<0.50	<0.50	<0.50	<0.75	6.23
DUP-1 (P14C-SW)		Surface Run-off	P14C	ALS	DCM	NA	CL	SW	SW	SW	---	---	18-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8I)		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P3-3-O)		Surface Water	P3-3	ALS	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	350 J	<250 CR	<250 CR	350 J	<250 CR	<250 CR	300 J	<250 CR	<250 CR	380 J	<250 CR	<250 CR	330 J	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P18-4.5D)		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	8-May-13	1,640	1,640	<250	1,700	1,700	1,700	1,240	1,240	1,240	<250	<250	<250	<250	<250	<250	4,300	6,300	322	380	<5.0	45.3	1,270	---
DUP-1 (P14.5-12I)		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	23-May-13	380	<250 CR	<250 CR	380	<250 CR	<250 CR	250	<250 CR	<250 CR	290	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	29.1	1.06 J	<0.50 UJ	<0.50	<0.75 UJ	---
DUP-1 (P6-8D-C)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.06	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	350 J	<250 CR	<250 CR	350 J	<250 CR	<250 CR	<250	<250	<250	330 J	<250 CR	<250 CR	<250	<250	<250	<100	<100	33.8	0.57	<0.50	<0.50	<0.75	---
DUP-1 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Dec-13	460	<250 CR	590 CR	460	<250 CR	<250 CR	370	<250 CR	<250 CR	980	590 CR	590 CR	350	<250 CR	<250 CR	<100	<100	4.02	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	9.72	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	Colluvium	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P6-8I)		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-1 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.57	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	1.61	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	7.43	0.86 J	<0.50	<0.50	<0.75	---
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	0.65 J	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8I)		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	680 J	<280 CR	660 CR	680 J	<280 CR	<280 CR	550 J	<250 CR	<250 CR	1,250 J	660 CR	660 CR	480 J	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	5.93
DUP-2 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	4.38 J	0.52	<0.50	<0.50	<0.75	---
DUP-2 (PEC-5D)		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P3.8-3D)		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P3.5-12D)		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-May-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D-E)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	2.36	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	380	<250 CR	480 CR	380	<250 CR	<250 CR	270	<250 CR	<250 CR	790	480 CR	480 CR	280	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	1,930	1,930	<250	1,960	---	1,960	920	---	920	<250	---	<250	<250	---	<250	4,410	3,740	60.5	208	<0.50 UJ	2.41 J	399	---
DUP-2 (P7.5-3)	+	Porewater EAZ	P7.5-3	ALS	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	---	---	---	2,740	---	2,740	---	---	---	530 J	---	530 J	---	---	---	---	---	---	---	---	---	---	---
DUP-2 (P7.5-3)-AG	+	Porewater EAZ	P7.5-3	Agat	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	1,340 J	1,340 J	340 J	1,360 J	---	1,360 J	---	---	---	340 J	---	340 J	---	---	---	---	---	---	---	---	---	---	---
DUP-2 (P7.5-3)-MA	+	Porewater EAZ	P7.5-3	Maxxam	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	1,500	1,500	380	1,500 J	---	1,500 J	---	---	---	380 J	---	380 J	---	---	---	---	---	---	---	---	---	---	---
DUP-2 (PEC-5D)		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	Beach sand/OC	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date
DUP-2 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14
DUP-3 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12
DUP-3 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12
DUP-3 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12
DUP-3 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12
DUP-3 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12
DUP-3 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12
DUP-3 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12
DUP-3 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13
DUP-3 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13
DUP-3 (P8-3)		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13
DUP-3 (P4.2-3D)		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13
DUP-3 (PR2-3-NBO)		Surface water	PR2-3	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13
DUP-3 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14
DUP-3 (P18.5-3D)		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	Till	9-Jun-14
DUP-3 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14
DUP-3 (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14
DUP-4 (P3-7D)		Porewater	P3-7	ALS	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12
DUP-4 (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12
DUP-4 (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12
DUP-4 (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12
DUP-4 (P9-7I)		Porewater	P9-7	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12
DUP-4 (P3-12-NBO)		Surface Water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13
DUP-4 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13
DUP-4 (P18-4.5S)		Porewater EAZ	P18-4.5	ALS	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13
DUP-4 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13
DUP-4 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13
DUP-4 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13
DUP-4 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Mar-14
DUP-4 (P8-12-O)		Surface water	P8-12	ALS	DCM	NA	EB	SW	SW	SW	Colluvium	---	13-Jun-14
DUP-4 (P8-7.5I)		Porewater	P8-7.5	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14
DUP-4 (P8-3)		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14
DUP-5 (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12
DUP-5 (PR2-12-NBO)		Surface Water	PR2-12	ALS	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12
DUP-5 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12
DUP-5 (P14.5-12I)		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jan-13
DUP-5 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13
DUP-5 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13
DUP-5 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-Sep-13
DUP-5 (P3-12-NBO)		Surface water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13
DUP-5 (PR2-3-O)		Surface water	PR2-3	ALS	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14
DUP-5 (PR2-3-O)-AG	+	Surface water	PR2-3	Agat	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14
DUP-5 (PR2-3-O)-MA	+	Surface water	PR2-3	Maxxam	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14
DUP-5 (P3-12-O)		Surface water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14
DUP-5 (P8-3)		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14
DUP-5 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14
DUP-6 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12
DUP-6 (P14.5-12D)		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12
DUP-6 (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12
DUP-6 (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13
DUP-6 (P4.9-5)		Porewater EAZ	P4.9-5	ALS	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13
DUP-6 (P14-17D)		Porewater	P14-17	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13
DUP-6 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13
DUP-6 (PR2-12-O)		Surface water	PR2-12	ALS	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14
DUP-6 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	10-Jun-14
DUP-6 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Till	12-Sep-14
DUP-6 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14
DUP-7 (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12
DUP-7 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12
DUP-7 (P14.5-12D)		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12
DUP-7 (P14.5-12I)		Porewater	P14.5-12	ALS	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13
DUP-7 (P15-12I)		Porewater	P15-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13
DUP-7 (P18-4.5D)		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13
DUP-7 (P3.8-3D)		Porewater	P3.8-3	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13
DUP-7 (P4.2-3D)		Porewater	P4.2-3	ALS	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14
DUP-7 (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14
DUP-7 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14
DUP-7 (P6.25-3)		Porewater EAZ	P6.25-3	ALS	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14
DUP-8 (P14-17I)		Porewater	P14-17	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12
DUP-8 (PEC-5I)		Porewater	PEC-5	ALS	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12
DUP-8 (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13
DUP-8 (P15-12D)		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13
DUP-8 (P18.5-3D)		Porewater	P18.5-3	ALS	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	---	19-Sep-13
DUP-8 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13
DUP-8 (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-14
DUP-8 (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	Weathered Colluvium	12-Jun-14
DUP-8 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14
DUP-9 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12
DUP-9 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12
DUP-9 (P14R-12I)		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13
DUP-9 (P3.8-3S)		Porewater EAZ	P3.8-3	ALS	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13
DUP-9 (PEC-5D)		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13
DUP-9 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13
DUP-9 (P3.5-12D)		Porewater	P3.5-12	ALS	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14
DUP-9 (P3.5-12D)	+	Porewater	P3.5-12	ALS	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14
DUP-9 (P3.5-12D)-AG	+	Porewater	P3.5-12	Agat	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14
DUP-9 (P3.5-12D)-MA	+	Porewater	P3.5-12	Maxxam	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14
DUP-9 (P8-3)		Porewater EAZ	P8-3	ALS	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	Colluvium	13-Jun-14
DUP-9 (P5.25-3)		Porewater EAZ	P5.25-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14
DUP-10 (P18-4.5D)		Porewater	P18-4.5	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13
DUP-10 (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13
DUP-10 (P18.5-3D)		Porewater	P18.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13
DUP-10 (P17.5-3D)		Porewater	P17.5-3	ALS	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14
DUP-10 (P17.5-3D)	+	Porewater	P17.5-3	ALS	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14
DUP-10 (P17.5-3D)-AG	+	Porewater	P17.5-3	Agat	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14
DUP-10 (P17.5-3D)-MA	+	Porewater	P17.5-3	Maxxam	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14
DUP-10 (P7.5-3)		Porewater EAZ	P7.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Colluvium	13-Jun-14
DUP-10 (P8-12-O)		Surface Water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14
DUP-11 (P6-3-NBO)		Surface water	P6-3	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13
DUP-11 (P8-12-NBO)		Surface water	P8-12	ALS	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13
DUP-11 (P14.5-12D)		Porewater	P14.5-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13
DUP-11 (P15-12D)		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14
DUP-11 (P6.5-3)		Porewater EAZ	P6.5-3	ALS	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14
DUP-11 (P3-12-O)		Surface Water	P3-12	ALS	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14
DUP-12 (P3-12-NBO)		Surface water	P3-12	ALS	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13
DUP-12 (P15-12D)		Porewater	P15-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13
DUP-12 (PEC-5D)		Porewater	PEC-5	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14
DUP-A (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11
DUP-A (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12
DUP-B (P9-7D)		Porewater	P9-7	ALS	Traditional	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11
DUP-B (P14R-12I)		Porewater	P14R-12	ALS	Traditional	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12
DUP-C (P3R-7I)		Porewater	P3R-7	ALS	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11
DUP-C (P14R-12D)		Porewater	P14R-12	ALS	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12
DUP-D (PR2-8D)		Porewater	PR2-8	ALS	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11
DUP-D (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12
DUP-E (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11
DUP-E (P6-8I)		Porewater	P6-8	ALS	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12
DUP-F (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11
DUP-F (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12
DUP-G (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11

Sample ID [4]	LEPH$_w$	Final LEPH$_w$	Final HEPH$_w$ [2,6]	EPH$_w$(C_{10}-<C_{19}) [1]	Revised EPH$_w$ (C_{10}-<C_{19}) [1]	Final EPH$_w$ (C_{10}-<C_{19}) [1,6]	EPH$_w$(C_{10}-<C_{19}) [1] (Silica gel)	Revised EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	Final EPH$_w$ (C_{10}-<C_{19}) [1] (Silica gel)	EPH$_w$(C_{19}-C_{32})	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) [6]	EPH$_w$(C_{19}-C_{32}) (Silica gel)	Revised EPH$_w$ (C_{19}-C_{32})	Final EPH$_w$ (C_{19}-C_{32}) (Silica gel)	VPH$_w$	VH$_w$ (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]	250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source	DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]	300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
DUP-2 (P6-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P9-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**3.13**	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (PR2-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-7.5D)	**270**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<250	<250	<250	**420**	<250 CR	<250 CR	<250	<250	<250	<100	<100	**0.98**	<0.50	<0.50	<0.50	<0.75	**10.5**
DUP-3 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50 UJ	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-7.5D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**5.81**	**0.56**	<0.50	<0.50	<0.75	---
DUP-3 (P8-3)	**750**	**750**	<250	**750**	**750**	**750**	<250	<250	<250	<250	<250	<250	<250	<250	<250	**1,640 J**	**3,240 J**	**515**	**302**	<1.0	**50.8**	**729**	---
DUP-3 (P4.2-3D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.72**	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (PR2-3-NBO)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-7.5D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.16 J**	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P18.5-3D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-7.5D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**40.1**	<0.50	<0.50	<0.50	<0.75	---
DUP-3 (P8-7.5D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**20.6**	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P3-7D)	**620 J**	<250 CR	<250 CR	**620 J**	<250 CR	<250 CR	**480 J**	<250 CR	<250 CR	**630 J**	<250 CR	<250 CR	**480 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P3.5-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P14R-12D)	**500**	<250 CR	<250 CR	**500**	<250 CR	<250 CR	**360**	<250 CR	<250 CR	**430**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P14R-12D)	**380 J**	<250 CR	<250 CR	**380 J**	<250 CR	<250 CR	**310 J**	<250 CR	<250 CR	**350 J**	<250 CR	<250 CR	**270**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P9-7I)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.76 J**	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P3-12-NBO)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P6-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P18-4.5S)	**1,080**	<440 CR	<600 CR	**1,080**	<440 CR	<440 CR	**820**	<410 CR	<410 CR	**1,520**	<600 CR	<600 CR	**1,300**	<460 CR	<460 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**7.68**	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**3.53**	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P9-7D)	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<250	<250 UJ	<250	<250 UJ	<250 UJ	<250	<250 UJ	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P6-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P8-12-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P8-7.5I)	**260**	**260**	<250	**260**	---	**260**	<250	---	<250	<250	---	<250	<250	---	<250	**110**	**130**	**15.5**	<0.50	<0.50	<0.50	<0.75	---
DUP-4 (P8-3)	**1,500**	**1,500**	<250	**1,500**	---	**1,500**	<250	---	<250	<250	---	<250	<250	---	<250	**670**	**790**	**79.3**	**13.1**	<0.50	**1.46**	**21.5**	---
DUP-5 (P14R-12D)	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (PR2-12-NBO)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**2.49**	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P14.5-12I)	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<250 UJ	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P9-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.05**	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P6.5-3)	**1,570**	**1,570**	<250	**1,600**	**1,600**	**1,600**	**840**	**840**	**840**	<250 UJ	<250	<250	<250	<250	<250	**5,200**	**7,600**	**1,060**	**383**	<5.0	**58.8**	**872**	---
DUP-5 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P3-12-NBO)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (PR2-3-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (PR2-3-O)-AG	**140**	**140**	<100	**140**	---	**140**	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
DUP-5 (PR2-3-O)-MA	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
DUP-5 (P3-12-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-5 (P8-3)	**1,020**	**1,020**	<250	**1,020**	---	**1,020**	<250	---	<250	<250	---	<250	<250	---	<250	**870**	**1,160**	**102**	**114**	<0.50	**2.79**	**74.4**	---
DUP-5 (P7.5-3)	**1,900**	**1,900**	**270**	**1,910**	---	**1,910**	**410**	---	**410**	**270**	---	**270**	<250	---	<250	**1,970**	**2,490**	**15.0**	**149**	<1.0	**2.5**	**354**	---
DUP-6 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P14.5-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P3.5-7D)	**370 J**	<250 CR	<250 CR	**370 J**	<250 CR	<250 CR	<250	<250	<250	**370 J**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P3.5-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P4.9-5)	**300**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	**250**	<250 CR	<250 CR	**300**	<250 CR	<250 CR	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P14-17D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P6.5-3)	**1,730**	**1,510 CR**	<250 CR	**1,740**	**1,520 CR**	**1,520 CR**	**510 J**	**290 CR**	**290 J,CR**	**400 J**	<250 CR	<250 CR	<250	<250	<250	**2,790**	**3,460**	**236**	**172**	<2.5	**5.2**	**262**	---
DUP-6 (PR2-12-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P3R-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-6 (P7.5-3)	**3,090 J**	**3,090**	<250	**3,100**	---	**3,100 J**	**810**	---	**810**	<250	---	<250	<250	---	<250	**2,970**	**3,740**	**48.0**	**187**	<2.5 UJ	**6.6**	**530**	---
DUP-6 (P6.5-3)	**1,250**	**1,250**	**410**	**1,250**	---	**1,250**	<250	---	<250	**410**	---	**410**	<250	---	<250	**770**	**1,010**	**119**	**35.2**	<0.50	**2.48**	**91.4**	---
DUP-7 (P14R-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (PR2-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P14.5-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P14.5-12I)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P15-12I)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P18-4.5D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P3.8-3D)	**660 J**	<270 CR	<280 CR	**660 J**	<270 CR	<270 CR	**440 J**	<250 CR	<250 CR	**760**	<280 CR	<280 CR	**470**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P4.2-3D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P6-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**4.19 J**	<0.50	<0.50	<0.50	<0.75	---
DUP-7 (P6.25-3)	**1,320**	**1,320**	<250	**1,340**	---	**1,340**	**360**	---	**360**	<250	---	<250	<250	---	<250	**2,060**	**3,800**	**565**	**251**	<2.5	**129**	**795**	---
DUP-7 (P6.25-3)	**1,190 J**	**1,190 J**	**260 J**	**1,190 J**	---	**1,190 J**	<250	---	<250	**260 J**	---	**260 J**	<250	---	<250	**1,250**	**1,850**	**301**	**107**	<1.0	**33.5**	**156**	---
DUP-8 (P14-17I)	**520**	<250 CR	**880 CR**	**520**	<250 CR	<250 CR	**630 J**	<310 CR	<310 UJ,CR	**1,240**	**880 CR**	**880 CR**	**480 J**	<250 CR	<250 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (PEC-5I)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P14R-12D)	**250**	<250 CR	<250	**250**	<250 CR	<250 CR	**310**	<250 CR	<250 CR	<250 UJ	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P15-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P18.5-3D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P3R-7D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P3R-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P9-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**37.2**	<0.50	<0.50	<0.50	<0.75	---
DUP-8 (P6.5-3)	**1,360**	**1,360**	<250	**1,360**	---	**1,360**	**320**	---	**320**	<250	---	<250	<250	---	<250	**1,290**	**1,800**	**275**	**43.6**	<1.0 UJ	**5.6**	**180**	---
DUP-9 (PR2-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50 UJ	<0.75	---
DUP-9 (PR2-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (P14R-12I)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (P3.8-3S)	<250 UJ	<250	<250	<250 UJ	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (PEC-5D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (PR2-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (P3.5-12D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-9 (P3.5-12D)	---	---	---	<250	---	<250	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
DUP-9 (P3.5-12D)-AG	<100	<100	<100	<100	---	<100	---	---	---	<100	---	<100	---	---	---	---	---	---	---	---	---	---	---
DUP-9 (P3.5-12D)-MA	<200	<200	<200	<200	---	<200	---	---	---	<200	---	<200	---	---	---	---	---	---	---	---	---	---	---
DUP-9 (P8-3)	**720**	**720**	<250	**720**	---	**720**	<250	---	<250	<250	---	<250	<250	---	<250	**850**	**1,210**	**82.4**	**160**	<0.50	**2.53**	**115**	---
DUP-9 (P5.25-3)	**2,270**	**2,270**	**330**	**2,300**	---	**2,300**	**510**	---	**510**	**330**	---	**330**	<250	---	<250	**2,460**	**3,430**	**188**	**106**	<2.5	**22.3**	**660**	---
DUP-10 (P18-4.5D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-10 (PR2-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-10 (P18.5-3D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-10 (P17.5-3D)	<300	<300	<250	<300	---	<300	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**0.93**	<0.50	<0.50	<0.50	<0.75	---
DUP-10 (P17.5-3D)	---	---	---	<250 UJ	---	<250 UJ	---	---	---	<250	---	<250	---	---	---	---	---	---	---	---	---	---	---
DUP-10 (P17.5-3D)-AG	**150**	**150**	**210 J**	**150**	---	**150**	---	---	---	**210 J**	---	**210 J**	---	---	---	---	---	---	---	---	---	---	---
DUP-10 (P17.5-3D)-MA	**240**	**240**	<200	**240 J**	---	**240 J**	---	---	---	<200 UJ	---	<200 UJ	---	---	---	---	---	---	---	---	---	---	---
DUP-10 (P7.5-3)	**1,610**	**1,610**	<250	**1,630**	---	**1,630**	**600**	---	**600**	<250	---	<250	<250	---	<250	**2,420**	**3,000**	**54.8**	**173**	<1.0	**3.2**	**349**	---
DUP-10 (P8-12-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-11 (P6-3-NBO)	**770 J**	<390 UJ,CR	<370 UJ,CR	**770 J**	<390 CR	<390 UJ,CR	**660 J**	<330 CR	<330 UJ,CR	**750 J**	<370 CR	<370 UJ,CR	**620 J**	<310 CR	<310 UJ,CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-11 (P8-12-NBO)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-11 (P14.5-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-11 (P15-12D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-11 (P6.5-3)	**1,480**	**1,480**	<250	**1,500**	---	**1,500**	**490**	---	**490**	<250	---	<250	<250	---	<250	**2,100**	**3,000**	**522**	**116**	<2.5	**3.4**	**257**	---
DUP-11 (P3-12-O)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-12 (P3-12-NBO)	**880 J**	<440 UJ,CR	<440 UJ,CR	**880 J**	<440 CR	<440 UJ,CR	**650 J**	<320 CR	<320 UJ,CR	**870 J**	<440 CR	<440 UJ,CR	**610 J**	<300 CR	<300 CR	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-12 (P15-12D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-12 (PEC-5D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-A (P6-8D)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**0.77**	<0.50	<0.50	<0.50	<0.75	---
DUP-A (P3.5-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-B (P9-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**6.26**	<0.50	<0.50	<0.50	<0.75	---
DUP-B (P14R-12I)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.24**	<0.50	<0.50	<0.50	<0.75	---
DUP-C (P3R-7I)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-C (P14R-12D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-D (PR2-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-D (P3R-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-E (P9-7D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**6.74**	<0.50	<0.50	<0.50	<0.75	---
DUP-E (P6-8I)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**24.5**	<0.50	<0.50	<0.50	<0.75	---
DUP-F (P6-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-F (P6-8D)	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-G (P9-7D)	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**7.55**	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}\text{-}<C_{19})$ [1]	Revised EPH_w $(C_{10}\text{-}<C_{19})$ [1]	Final EPH_w $(C_{10}\text{-}<C_{19})$ [1,6]	$EPH_w(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}\text{-}<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}\text{-}C_{32})$	Revised EPH_w $(C_{19}\text{-}C_{32})$	Final EPH_w $(C_{19}\text{-}C_{32})$ [6]	$EPH_w(C_{19}\text{-}C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}\text{-}C_{32})$	Final EPH_w $(C_{19}\text{-}C_{32})$ (Silica gel)	VPH_w	VH_w $(C_6\text{-}C_{10})$	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
DUP-G (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**15.5**	**2.60**	<0.50	<0.50	**1.23**	---
DUP-H (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	**1.32**	<0.50	<0.50	<0.50	<0.75	---
DUP-H (P14R-12I)		Porewater	P14R-12	ALS	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<1.2	<0.86	---
DUP-H (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-I (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.70	<0.75	---
DUP-I (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**23.4**	<0.50	<0.50	<0.50	<0.75	---
DUP-J (P3.5-7D)		Porewater	P3.5-7	ALS	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.60	<0.78	---
DUP-J (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-K (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**10.7**	**0.55**	<0.50	<0.50	<0.75	---
DUP-K (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**6.89**	<0.50	<0.50	<0.50	**2.22**	---
DUP-L (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-L (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**1.52**	<0.50	<0.50	<0.50	<0.75	---
DUP-M (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-M (P3R-7D)		Porewater	P3R-7	ALS	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
DUP-N (P8-7.5D)		Porewater	P8-7.5	ALS	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**9.7**	**1.3**	<1.0	<1.0	<1.4	---
DUP-N (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	**7.10**	<0.50	<0.50	<0.50	<0.75	---
DUP-O (P6-8D)		Porewater	P6-8	ALS	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**1.43**	<0.50	<0.50	<0.50	<0.75	---
DUP-P (P9-7D)		Porewater	P9-7	ALS	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	**10.6**	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-May-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	23-May-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	24-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-May-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	1-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	2-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	3-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	4-Dec-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK -1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK - 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Sep-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Sep-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Dec-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TB-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	29-Feb-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TB-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	1-Mar-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	2-Mar-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	3-Mar-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TB-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TB-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-May-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	22-Aug-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	21-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	22-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
T-BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	23-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	24-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	25-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	22-Dec-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Jan-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Feb-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jun-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
T-BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	22-Mar-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	4-Apr-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Apr-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
T-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Jun-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jun-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-May-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (μg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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TB-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	29-Feb-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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ALS TRAVEL BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK-4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	24-Nov-16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
ALS TRAVEL BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 7		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 7		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 8		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 8		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 9		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 9		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 10		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 10		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 10		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 11		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 11		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 11		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 12		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 12		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 12		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 13		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 13		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 14		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 14		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 15		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
ALS TRAVEL BLANK 16		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	4-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-May-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jun-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
EQUIPMENT BLANKS		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jun-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [4]		Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	$LEPH_w$	Final $LEPH_w$	Final $HEPH_w$ [2,6]	$EPH_w(C_{10}-<C_{19})$ [1]	Revised EPH_w $(C_{10}-<C_{19})$ [1]	Final EPH_w $(C_{10}-<C_{19})$ [1,6]	$EPH_w(C_{10}-<C_{19})$ [1] (Silica gel)	Revised EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	Final EPH_w $(C_{10}-<C_{19})$ [1] (Silica gel)	$EPH_w(C_{19}-C_{32})$	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ [6]	$EPH_w(C_{19}-C_{32})$ (Silica gel)	Revised EPH_w $(C_{19}-C_{32})$	Final EPH_w $(C_{19}-C_{32})$ (Silica gel)	VPH_w	VH_w (C_6-C_{10})	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]														250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source														DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT [5]														300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
RINSATE 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	1-Dec-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	2-Dec-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	13-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	3-Dec-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	11-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	24-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
RINSEATE 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	<250	<250	<250	<250	<250	<250	---	---	---	<250	<250	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	10-Mar-15	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	15-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	8-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	7-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RB-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	29-Feb-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	16-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	16-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	21-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jan-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	16-Feb-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	5-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
E-BLANK-1		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	**1.14**	<0.75	---
RINSEATE 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<250	<250	<250	<250	<250	<250	---	---	---	<250	<250	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	10-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	8-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RB-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	1-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	17-May-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	17-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	22-Nov-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
R-BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-2		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	6-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<1,400	<1,400	<1,400	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-14	<250 UJ	<250 UJ	<250 UJ	<250 UJ	---	<250 UJ	---	---	---	<250 UJ	---	<250 UJ	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jun-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	11-Sep-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	9-Dec-15	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RB-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	2-Mar-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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R-BLANK-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	19-Aug-16	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
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R-BLANK-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	15-Mar-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE BLANK-3		NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	NA	7-Jun-17	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE-6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSATE 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jul-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	3-Aug-12	<250	<250	<250	<250	<250	<250	---	---	---	<250	<250	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Sep-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Oct-12	<250	<250	<250	<250	<250	<250	---	---	---	<250	<250	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	**0.56**	**0.85**	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jan-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Sep-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Oct-12	<250	<250	<250	<250	<250	<250	---	---	---	<250	<250	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Nov-12	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jan-13	<250	<250	<250	<250	---	<250	<250	---	<250	<250	---	<250	<250	---	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Sep-12	<250	<250	<250	<250	---	<250	---	---	---	<250	---	<250	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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RINSEATE BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
RINSEATE BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Jun-13	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	27-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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TRAVEL BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
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TRAVEL BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK -4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	16-Sep-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRAVEL BLANK-6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	4-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

TABLE A-1
CONCENTRATIONS OF PETROLEUM HYDROCARBON PARAMETERS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

													LEPH[4]	Final LEPH[4]	Final HEPH[4,5]	EPH[4](C[19]-C[32])[1]	Revised EPH[4] (C[19]-C[32])[1]	Final EPH[4] (C[19]-C[32])[1,6]	EPH[4](C[19]-C[32])[1] (Silica gel)	Revised EPH[4] (C[19]-C[32])[1] (Silica gel)	Final EPH[4] (C[19]-C[32])[1] (Silica gel)	EPH[4](C[19]-C[32])	Revised EPH[4] (C[19]-C[32])	Final EPH[4] (C[19]-C[32])[1]	EPH[4](C[19]-C[32]) (Silica gel)	Revised EPH[4] (C[19]-C[32])	Final EPH[4] (C[19]-C[32]) (Silica gel)	VPH[4]	VH[4] (C[6]-C[10])	Benzene	Ethylbenzene	Styrene	Toluene	Xylenes	MTBE
Updated Screening Level [3]													250	250	NS	500	500	500	500	500	500	NS	NS	NS	NS	NS	NS	150	1,500	110	250	72	330	30	440
Source													DL	DL	NS	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	CSR/10	DL	DL	DL	NS	NS	NS	CSR/10	CSR/10	BC AWQG	BC AWQG	CSR/10	CSR/10	BC AWQG (FW)	BC AWQG
RBMT[7]													300	300	---	---	---	---	---	---	---	---	---	---	---	---	---	1,500	---	2,100	320	---	770	330	---
Sample ID [4]		**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Lithology of Screen Interval (Secondary)**	**Sample Date**																						
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jun-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	1-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	1-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	2-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	2-Aug-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	14-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	<0.50
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 1		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	17-Jun-15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	4-Jul-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	13-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jan-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 2		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jul-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Oct-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	8-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	9-Dec-13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 3		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jul-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 4		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 5		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jul-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---
TRIP BLANK 6		NA	NA	ALS	DCM	NA	NA	NA	NA	NA	NA	NA	6-Jul-12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.75	---

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.
1 - BCMoE (British Columbia Ministry of Environment) groundwater standard is for LEPH corrected for polycyclic aromatic hydrocarbons (PAHs); EPHw(C10-<C19) 1 is LEPH uncorrected for PAHs and therefore conservative.
2 - HEPH USL removed per the BCMoE letter from June 21, 2013

3 - The rational supporting the Updated Screening Levels (USLs) for porewater and surface water is provided by SLR Consulting Canada Ltd. in their memorandum entitled Updated Screening Levels for Foreshore Monitoring including an Addendum, dated May 9 and June 6, 2013, respectively. A general hierarchy was developed for defining USLs as follows: First) BC Water Quality Guidelines (approved then working); Second) 1/10 CSR aquatic life marine standards (for porewater); and lastly, reference area concentration (which commonly defaults to the laboratory detection limit)
4 - Sample IDs do not exactly match laboratory reports. They have been cleaned up for easy comparison of same location over time.
5 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than Updated Screening Level
SHADE	Sample concentration greater than Updated Screening Level and/or RBMT

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres
Acronyms
AG - Aquagate
ATB- well located in anchor trench barrier
BC AWQG - British Columbia Approved Water Quality Guidelines. Marine unless otherwise noted as FW (freshwater).
C - Compliance well (Post-construction)
CL - culvert location
CS - well located cross slope
CSR/10 - Contaminated Sites Regulation (including up to Stage 11 amendments, November 2017) divided by ten (10)
DL - detection limit
DS - well located down slope
EAZ - ecologically active zone
EB - eastern barrier
E FPTS - Eastern Foreshore Passive Treatment System
EPHw - extractable petroleum hydrocarbons in water
HEPHw - heavy extractable petroleum hydrocarbons in water
IBA - In between area
LEPHw - light extractable petroleum hydrocarbons in water
NA - not applicable
NBO - near bottom samples
NS - no standard established for indicated parameter
OB - well located within the original barrier
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
U - Up gradient well (Post-construction)
USAT - well located up slope of anchor trench
VHw - volatile hydrocarbons in water
VPHw - volatile petroleum hydrocarbons in water
W FPTS - Western Foreshore Passive Treatment System

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
Post-Construction FTPS														
P3-6-NBO	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	**0.0084**	<0.05
P3-6-NBO	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
P3-6-NBO	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<0.005	<0.05
P3-6-NBO	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<0.005	<0.05
P3-6-NBO	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
P3-6-O	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P3-6-O	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
P3-6-O	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
P3-6-O	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
P3-6-O	Surface Water	PW17-06	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
P3-12-NBO	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
DUP1 (P3-12-NBO)	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
QA/QC RPD											11-Dec-17		---	---
P3-12-NBO	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
P3-12-NBO	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<0.005	<0.05
P3-12-NBO	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	13-Sep-18	L2163427	<0.005	<0.05
P3-12-NBO	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
DUP-2 (P3-12-NBO)	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
QA/QC RPD											3-Dec-18		---	---
P3-12-O	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P3-12-O	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
P3-12-O	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
DUP-5 (P3-12-O)	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
QA/QC RPD											14-Jun-18		---	---
P3-12-O	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
P3-12-O	Surface Water	PW17-08	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
P6-6-NBO	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
P6-6-NBO	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	**0.054**
P6-6-NBO	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<0.005	<0.05
P6-6-NBO	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<0.005	<0.05
P6-6-NBO	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Report	Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
P6-6-O	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P6-6-O	Surface Water	PW17-18	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
P6-6-O	Surface Water	PW17-18	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
P6-6-O	Surface Water	PW17-18	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
P6-6-O	Surface Water	PW17-18	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
P6-12-NBO	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
P6-12-NBO	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
P6-12-NBO	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<0.005	<0.05
P6-12-NBO	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	**0.01**	<0.050
P6-12-O	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P6-12-O	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
DUP 5 (P6-12-O)	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
QA/QC RPD											20-Mar-18		---	---
P6-12-O	Surface Water	PW17-20	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
P6-12-O	Surface Water	PW17-20	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
DUP-5 (P6-12-O)	Surface Water	PW17-20	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
QA/QC RPD											12-Sep-18		---	---
P6-12-O	Surface Water	PW17-20	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
P8-6-NBO	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
P8-6-NBO	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
P8-6-NBO	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<0.005	<0.05
P8-6-NBO	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<0.005	<0.05
P8-6-NBO	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
P8-6-O	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P8-6-O	Surface Water	PW17-28	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
P8-6-O	Surface Water	PW17-28	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
P8-6-O	Surface Water	PW17-28	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
P8-6-O	Surface Water	PW17-28	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
P8-12-NBO	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	<0.005	<0.05
P8-12-NBO	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	<0.005	<0.05
P8-12-NBO	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
P8-12-NBO	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	<0.005	<0.05
P8-12-NBO	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
DUP-1 (P8-12-NBO)	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	<0.0050	<0.050
QA/QC RPD											3-Dec-18		---	---
P8-12-O	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	<0.005	<0.05
P8-12-O	Surface Water	PW17-30	ALS	Hexane	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	<0.005	<0.05
P8-12-O	Surface Water	PW17-30	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	<0.005	<0.05
P8-12-O	Surface Water	PW17-30	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	<0.005	<0.05
P8-12-O	Surface Water	PW17-30	ALS	Hexane	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	<0.0050	<0.050
CBP-1	Porewater	CBP-1	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<0.005	<0.05
CBP-1	Porewater	CBP-1	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	<0.005	<0.05
CBP-1	Porewater	CBP-1	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
CBP-2	Porewater	CBP-2	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<0.005	<0.05
CBP-2	Porewater	CBP-2	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	<0.005	<0.05
CBP-2	Porewater	CBP-2	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	4-Dec-18	L2205928	<0.0050	<0.050
CBP-5	Porewater	CBP-5	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	**0.0184**	<0.05
CBP-5	Porewater	CBP-5	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	**0.0212**	<0.05
CBP-5	Porewater	CBP-5	ALS	Hexane	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
CBP-6	Porewater	CBP-6	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	**0.0116**	<0.05
CBP-6	Porewater	CBP-6	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	<0.005	<0.05
CBP-6	Porewater	CBP-6	ALS	Hexane	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<0.0050	<0.050
CBP-7	Porewater	CBP-7	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<0.005	<0.05
DUP-1 (CBP-7)	Porewater	CBP-7	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	<0.005	<0.05
QA/QC RPD											13-Jun-18		---	---
CBP-7	Porewater	CBP-7	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	<0.005	<0.05
CBP-7	Porewater	CBP-7	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
CBP-8	Porewater	CBP-8	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<0.005	<0.05
CBP-8	Porewater	CBP-8	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<0.005	<0.05
CBP-8	Porewater	CBP-8	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<0.0050	<0.050

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

Sample ID	Matrix	Sample Location	Laboratory	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Sample Date	Report	Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
CBP-15	Porewater	CBP-15	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	14-Jun-18	L2112662	<0.005	<0.05
CBP-15	Porewater	CBP-15	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	<0.005	<0.05
CBP-15	Porewater	CBP-15	ALS	Hexane	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	6-Dec-18	L2207439	<0.0050	<0.050
CBP-16	Porewater	CBP-16	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	**0.007**	<0.05
CBP-16	Porewater	CBP-16	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<0.005	<0.05
CBP-16	Porewater	CBP-16	ALS	Hexane	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<0.0050	<0.050
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
DUP1 (PW17-01)	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
QA/QC RPD											14-Nov-17		---	---
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	16-Jan-18	L2045816	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	**0.0068**	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Jun-18	L2111824	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	<0.005	<0.05
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<0.0050	<0.050
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.050
PW17-01	Porewater	PW17-01	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	<0.0050	<0.050
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Jun-18	L2111824	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<0.005	<0.05
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<0.0050	<0.050
PW17-02	Porewater	PW17-02	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<0.0050	<0.050
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Nov-17	L2023753	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	23-Mar-18	L2071889	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-03	Porewater	PW17-03	ALS	Hexane	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<0.0050	<0.050
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	23-Mar-18	L2071889	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	<0.005	<0.05
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	<0.0050	<0.050
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.050
PW17-04	Porewater EAZ	PW17-04	ALS	Hexane	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Dec-19	L2395640	<0.0050	<0.050
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
DUP2 (PW17-05)	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
QA/QC RPD											13-Dec-17		---	---
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	23-Mar-18	L2071889	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<0.005	<0.05
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<0.0050	<0.050
PW17-05	Porewater EAZ	PW17-05	ALS	Hexane	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Dec-19	L2395640	<0.0050	<0.050
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	23-Mar-18	L2071889	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<0.005	<0.05
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<0.0050	<0.050
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<0.0050	<0.050
PW17-06	Porewater	PW17-06	ALS	Hexane	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Dec-19	L2395640	<0.0050	<0.050
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Nov-17	L2023092	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	5-Jun-19	L2286145	<0.0050	<0.050
PW17-07	Porewater EAZ	PW17-07	ALS	Hexane	S	W FPTS	0.70-1.00	0.7	1	Beach sand	11-Dec-19	L2395640	<0.0050	<0.050
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-08	Porewater	PW17-08	ALS	Hexane	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Dec-19	L2395640	<0.0050	<0.050
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	<0.005	<0.05
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<0.0050	<0.050
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.050
PW17-09	Porewater	PW17-09	ALS	Hexane	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	<0.0050	<0.050
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<0.0050	<0.050
PW17-10	Porewater	PW17-10	ALS	Hexane	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	<0.0050	<0.050
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Nov-17	L2023753	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Dec-18	L2205028	<0.0050	<0.050
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-11	Porewater	PW17-11	ALS	Hexane	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	**0.0188**	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	**0.0052**	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	**0.0052**	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	**0.016**	<0.05
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	**0.0147**	<0.050
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-12	Porewater	PW17-12	ALS	Hexane	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	<0.005	<0.05
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<0.0050	<0.050
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.050
PW17-13	Porewater	PW17-13	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	<0.0050	<0.050
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	**0.046**	<0.050
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	<0.0050	<0.050
PW17-14	Porewater	PW17-14	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	13-Dec-17	L2035368	**0.008**	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	**0.011**	<0.050
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-15	Porewater	PW17-15	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	<0.005	<0.05
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<0.005	<0.05
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<0.005	**2.1**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<0.005	**1.98**
QA/QC RPD											16-Jan-18		---	5.9%
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	<0.005	<2.
DUP1 (PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	<0.005	<2.
QA/QC RPD											14-Feb-18		---	---
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<0.005	<2.
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<0.005	<5.
DUP-1(PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<0.005	<5.
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<0.005	<0.7
DUP-2(PW17-16)	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	<0.005	<0.9
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	<0.005	<0.2
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	<0.0050	<2.0
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.70
PW17-16	Porewater EAZ	PW17-16	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<0.0050	<0.60
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<0.005	<0.05
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
DUP3 (PW17-17)	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
QA/QC RPD											13-Dec-17		---	---
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05
DUP2 (PW17-17)	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05
QA/QC RPD											16-Jan-18		---	---
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<0.005	<0.05
DUP2 (PW17-17)	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	<0.005	<0.05
QA/QC RPD											14-Feb-18		---	---
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<0.005	<0.05
DUP-2(PW17-17)	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<0.005	<0.05
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	<0.005	<0.05
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<0.005	<0.05
DUP-1 (PW17-17)	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	<0.005	<0.05
QA/QC RPD											11-Sep-18		---	---
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<0.0050	<0.060
PW17-17	Porewater EAZ	PW17-17	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<0.0050	<0.10
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<0.005	<0.05
DUP3 (PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<0.005	<0.05
QA/QC RPD											15-Nov-17		---	---
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<0.005	<0.05
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<0.005	<0.05
DUP3 (PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<0.005	<0.05
QA/QC RPD											16-Jan-18		---	---
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<0.005	<0.05
DUP3 (PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	<0.005	<0.05
QA/QC RPD											14-Feb-18		---	---
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<0.005	<0.05
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<0.005	<0.05
DUP-3(PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<0.005	<0.05
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<0.005	<0.05
DUP-3(PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	<0.005	<0.05
QA/QC RPD											13-Jun-18		---	---
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<0.005	<0.05
DUP-2(PW17-18)	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	<0.005	<0.05
QA/QC RPD											11-Sep-18		---	---
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	<0.0050	<0.050
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<0.0050	<0.050
PW17-18	Porewater	PW17-18	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<0.0050	<0.050
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Dec-17	L2034402	<0.005	<0.05
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	15-Jan-18	L2045142	<0.005	<0.2
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	13-Feb-18	L2056920	<0.005	<0.1

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	21-Mar-18	L2070802	<0.005	<0.2
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	16-Apr-18	L2080621	<0.005	<0.2
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Jun-18	L2111276	<0.005	**0.096**
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Sep-18	L2161513	<0.005	<0.07
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Dec-18	L2205928	<0.0050	<0.060
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Jun-19	L2285149	<0.0050	<0.050
PW17-19	Porewater	PW17-19	ALS	Hexane	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Dec-19	L2395326	<0.0050	<0.050
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-20	Porewater EAZ	PW17-20	ALS	Hexane	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Nov-17	---		
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-17	---		
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	---		
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	---		
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<0.005	<0.2
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	<0.005	<0.09
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	<0.005	<0.2
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2163271	<0.005	<0.2
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	<0.0050	<0.20
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	<0.0050	<0.10
PW17-21	Porewater EAZ	PW17-21	ALS	---	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<0.0050	<0.090
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	<0.005	<0.05
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
QA/QC RPD											13-Dec-17		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05
QA/QC RPD											16-Jan-18		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<0.005	<0.05
DUP4 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<0.005	<0.05
QA/QC RPD											15-Feb-18		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<0.005	<0.05
DUP 4(PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<0.005	<0.05
QA/QC RPD											22-Mar-18		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<0.005	<0.05
DUP-4(PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	<0.005	<0.05
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<0.005	<0.05
DUP 4(PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<0.005	<0.05
QA/QC RPD											14-Jun-18		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Sep-18	L2161513	<0.005	<0.05
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
DUP-3 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	<0.0050	<0.050
QA/QC RPD											5-Dec-18		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<0.0050	<0.050
DUP-2 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	<0.0050	<0.050
QA/QC RPD											5-Jun-19		---	---
PW17-22	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<0.0050	<0.050
DUP-1 (PW17-22)	Porewater EAZ	PW17-22	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<0.0050	<0.050
QA/QC RPD											12-Dec-19		---	---
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Sep-18	L2161513	<0.005	<0.05
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<0.0050	<0.050
DUP-4 (PW17-23)	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<0.0050	<0.050
QA/QC RPD											6-Dec-18		---	---
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<0.0050	<0.050
DUP-3 (PW17-23)	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	<0.0050	<0.050

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
QA/QC RPD											5-Jun-19		---	---
PW17-23	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<0.0050	<0.050
DUP-2 (PW17-23)	Porewater	PW17-23	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<0.0050	<0.050
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-24	Porewater	PW17-24	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
DUP2 (PW17-25)	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
QA/QC RPD											14-Nov-17		---	---
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	<0.005	<0.05
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	**0.006**	<0.050
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-25	Porewater	PW17-25	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Nov-17	L2023753	<0.005	<0.05
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	<0.005	<0.05
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	<0.005	<0.05
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	L2057618	<0.005	<0.05
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<0.005	<0.2
DUP 1(PW17-26)	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	<0.005	<0.1
QA/QC RPD											22-Mar-18		---	---

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	17-Apr-18	L2081248	<0.005	<0.2
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	<0.005	<0.2
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Sep-18	L2163271	<0.005	<0.2
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	<0.0050	<0.050
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	<0.0050	<0.050
DUP 1(PW17-26)	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	<0.0050	<0.050
QA/QC RPD											6-Jun-19		---	---
PW17-26	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<0.0050	<0.050
DUP 3 (PW17-26)	Porewater EAZ	PW17-26	ALS	Hexane	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	<0.0050	<0.050
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Nov-17	L2023753	<0.005	<0.3
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	<0.005	<0.05
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	<0.005	<0.05
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	<0.005	<0.07
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<0.005	<0.05
DUP 2(PW17-27)	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	<0.005	<0.05
QA/QC RPD											22-Mar-18		---	---
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	17-Apr-18	L2081248	<0.005	<0.05
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	<0.005	<0.05
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	<0.005	<0.05
DUP-3(PW17-27)	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	<0.005	<0.05
QA/QC RPD											12-Sep-18		---	---
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	<0.0050	<0.050
DUP-5 (PW17-27)	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	<0.0050	<0.050
QA/QC RPD											6-Dec-18		---	---
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Jun-19	L2287095	<0.0050	<0.050
PW17-27	Porewater EAZ	PW17-27	ALS	Hexane	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	<0.0050	<0.050

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Nov-17	L2023753	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<0.005	<0.05
DUP 3(PW17-28)	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	<0.005	<0.05
QA/QC RPD											22-Mar-18		---	---
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	<0.005	<0.05
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<0.005	<0.05
DUP-4(PW17-28)	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	<0.005	<0.05
QA/QC RPD											12-Sep-18		---	---
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<0.0050	<0.050
DUP-6 (PW17-28)	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	<0.0050	<0.050
QA/QC RPD											6-Dec-18		---	---
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Jun-19	L2287095	<0.0050	<0.050
PW17-28	Porewater	PW17-28	ALS	Hexane	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	<0.0050	<0.050
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Feb-18	L2056918	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	<0.005	<0.05
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	<0.0050	<0.050
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Jun-19	L2285149	<0.0050	<0.050
PW17-29	Porewater	PW17-29	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	<0.0050	<0.050
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Sep-18	L2162362	<0.005	<0.05
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-30	Porewater	PW17-30	ALS	Hexane	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Sep-18	L2163271	<0.005	<0.05
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-31	Porewater	PW17-31	ALS	Hexane	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<0.005	<0.05
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-32	Porewater	PW17-32	ALS	Hexane	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	<0.005	<0.05

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	<0.005	<0.05
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	<0.0050	<0.050
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	<0.0050	<0.050
PW17-33	Porewater	PW17-33	ALS	Hexane	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	<0.0050	<0.050
R-BLANK 1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	15-Nov-17	L2023092	<0.005	<0.05
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	15-Jan-18	L2045142	<0.005	<0.05
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	15-Feb-18	L2056920	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	16-Nov-17	L2023753	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	16-Jan-18	L2045816	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	14-Feb-18	L2056918	<0.005	<0.05
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	13-Dec-17	L2035368	<0.005	<0.05
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	15-Feb-18	L2057618	<0.005	<0.05
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	<0.005	<0.05
RINSATE-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	11-Dec-17	L2033765	<0.005	<0.05
RINSATE-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	12-Dec-17	L2034402	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	17-Apr-18	L2081248	<0.005	<0.05
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	12-Jun-18	L2111276	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	13-Jun-18	L2111824	<0.005	<0.05
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112662	<0.005	<0.05
R-BLANK 1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	10-Sep-18	L2161513	<0.005	<0.05
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	11-Sep-18	L2162362	<0.005	<0.05
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163271	<0.005	<0.05
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	03-Dec-18	L2205030	<0.0050	<0.050
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	04-Dec-18	L2205928	<0.0050	<0.050
R-BLANK-3	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	05-Dec-18	L2206732	<0.0050	<0.050
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	04-Jun-19	L2285149	<0.0050	<0.050
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	05-Jun-19	L2286145	<0.0050	<0.050

TABLE A2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN POREWATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Benzo(a)pyrene[3]	Naphthalene
Upper Cap Concentrations[1]													1	100
RBMT[2]													0.28	44
Reported Detection Limit													0.005	0.05
Sample ID	**Matrix**	**Sample Location**	**Laboratory**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**		
R-BLANK-1	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	10-Dec-19	L2395326	<0.0050	<0.050
R-BLANK-2	NA	NA	ALS	Hexane	NA	NA	NA	NA	NA	NA	11-Dec-19	L2395640	<0.0050	<0.050

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.

1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their
3 -The Ministry of Environment and Climate Change Strategy (ENV) requires the co-reporting of PAHs when LEPH and HEPH calculations are required, consequently, LEPH and HEPH must be co-reported with the corresponding PAH results. Although these PAHs are not considered site specific contaminants of concern (COCs), they were analyzed to calculate LEPH and/or HEPH and were either not detected or detected below Updated Screening Levels (USLs). For the purpose of this monitoring report, these PAHs have not been tabulated; however, as it is an ENV requirement, the data has been included in the ALS laboratory reports provided in Appendix C.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
E FPTS - Eastern Foreshore Passive Treatment System
IBA - In between area
NA - not applicable
NBO - near bottom samples
NS - no standard established for indicated parameter.
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
U - Up gradient well (Post-construction)
W FPTS - Western Foreshore Passive Treatment System

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ)[1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater)[1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02[5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG[2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
Pre-Construction FPTS																														
PSI Samples																														
P6-3 *	Porewater EAZ	P6-3	DCM	NA	EB	0.50-0.70	0.50	0.70	Weathered Colluvium	---	16-Jul-10	<0.050	<0.10	<0.15	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.320**	<0.050	**56.5**	**0.226**	**0.197**	<0.60	**57.2**
P8-0-A *	Porewater EAZ	P8-0	DCM	NA	EB	0.05-0.15	0.05	0.15	Beach sand	---	16-Jul-10	<1.5	<0.30	<1.0	<0.15	**0.127**	**0.038**	**0.059**	**0.067**	<0.050	**0.141**	<0.050	<0.10	**1.64**	<0.050	**53.2**	**1.74**	**0.791**	<1.7	**63.6**
Field Duplicate/Equipment Blank/Travel Blank																														
DUP-15 (P6-3) *	Porewater EAZ	P6-3	---	NA	EB	0.50-0.70	0.50	0.70	Weathered Colluvium	---	16-Jul-10	Not Sampled																		
RINSE1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	16-Jul-10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.071**	<0.050	<0.050	<0.050	<0.20
TRAVEL BLANK	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	16-Jul-10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DSI Samples																														
Western IRA Barrier																														
P2.5-7I	Porewater EAZ	P2.5-7	DCM	NA	WB	0.7-0.9	0.7	0.9	Beach sand	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.170**	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-May-11	**0.745**	<0.050	<0.050	**0.104**	**0.098**	**0.025**	**0.062**	<0.050	<0.050	**0.057**	<0.050	**0.703**	**0.499**	<0.050	**0.121**	**1.78**	**0.534**	<0.050	**4.72**
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-W #	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	20-Apr-11	<1.5	<0.40	<2.5	**1.28**	**1.55**	**1.54**	**0.966**	**0.578**	**1.64**	**1.72**	**0.212**	**3.27**	**1.36**	**0.723**	<2.5	**4.95**	**4.01**	<2.0	**23.8**
P3-7D	Porewater	P3-7	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Feb-11	<0.15	<0.050	<0.060	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<0.20	<0.52
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	<0.25
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	DCM	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	21-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	NA	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.12	<0.050	<0.050	<0.050	<0.23
P3.5-7S	Porewater EAZ	P3.5-7	DCM	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	22-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.304**	<0.050	<0.050	<0.050	**0.30**
P3.5-7I	Porewater	P3.5-7	DCM	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	NA	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.170**	<0.050	<0.050	**0.269**	**0.44**
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7S	Porewater EAZ	P3R-7	DCM	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	18-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.070	<0.23
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	18-Apr-11	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.124**	<0.050	<0.50	**0.083**	<0.050	<0.30	<0.64
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	18-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.078**	<0.050	<0.050	<0.050	<0.21
Eastern IRA Barrier																														
P5-3-0.4S	Grab sample	P5-3	DCM	NA	EB	Grab sample	Grab sample	Grab sample	---	---	11-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.242**	<0.050	<0.050	<0.050	**0.24**
P5-3I	Porewater EAZ	P5-3	DCM	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.399**	**0.069**	<0.050	<0.050	**0.47**
P5-3D	Porewater	P5-3	DCM	NA	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	23-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.359**	<0.050	<0.050	<0.050	**0.36**
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.5-3-W #	Porewater EAZ	P5.5-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.628**	<0.050	<0.050	<0.050	**0.63**
P6-3S *	Porewater EAZ	P6-3	DCM	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	25-Jan-11	**0.130**	**0.071**	<0.070	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.050	<0.31	<0.060	**0.130**	<0.050	**6.36**	**0.108**	<0.13	<0.10	**6.80**
P6-3S *	Porewater EAZ	P6-3	DCM	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	11-Feb-11	**0.461**	<0.085	**0.055**	<0.085	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.493**	<0.050	**44.6**	**0.258**	<0.050	<0.73	**45.8**
P6-3I *	Porewater EAZ	P6-3	DCM	NA	EB	0.5-0.7	0.5	0.7	Weathered Colluvium	---	9-Feb-11	**0.445**	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.420**	<0.050	**49.3**	**0.164**	<0.050	<0.59	**50.3**
P6-3D *	Porewater	P6-3	DCM	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	**0.573**	<0.090	<0.050	**0.069**	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.573**	<0.050	**51.0**	**0.300**	<0.050	<0.72	**52.5**
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.25**	<0.050	<0.050	<0.050	**1.25**
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.05**	<0.050	<0.050	<0.050	**1.05**
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.716**	<0.050	<0.050	<0.050	**0.72**
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	<0.25
P6-12I	Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.14	<0.050	<0.050	<0.050	<0.24
P6-12D	Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.34	<0.050	<0.050	<0.050	<0.40
P7-3-W #	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P8-3S *	Porewater EAZ	P8-3	---	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Jan-11	Not Sampled																		
P8-3S *	Porewater EAZ	P8-3	DCM	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.12	<0.050	<0.050	<0.13	---
P8-3D *	Porewater EAZ	P8-3	---	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	27-Jan-11	Not Sampled																		
P8-3D *	Porewater EAZ	P8-3	DCM	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.38	<0.050	**0.059**	<0.85	---
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.115**	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.098**	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	6-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.082**	<0.050	<0.050	<0.050	<0.21
P8-12S	Porewater EAZ	P8-12	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	28-Jan-11	Not Sampled																		
P8-12S	Porewater EAZ	P8-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	<0.25
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	28-Jan-11	<0.17	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.060	<0.050	<0.16 U	<0.35	**0.064**	<0.050	<0.50
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	---
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.19 U	<0.050	<0.050	<0.050	<0.28
P9-3-W #	Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	**0.059**	**0.073**	<0.050	**0.063**	**0.055**	<0.050	**0.139**	<0.050	<0.050	**0.087**	**0.120**	**0.122**	<0.050	**0.72**
P9-7S	Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.301**	<0.050	<0.050	<0.050	**0.30**
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.431**	<0.050	<0.050	<0.050	**0.43**
P10-3I	Porewater EAZ	P10-3	DCM	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.451**	<0.050	<0.050	<0.050	**0.45**
P10-3D	Porewater	P10-3	DCM	NA	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.341**	<0.050	<0.050	<0.050	**0.34**
Culvert Runoff Area																														
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	11-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.015	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.11	<0.050	<0.050	<0.050	<0.23
P14-3I	Porewater EAZ	P14-3	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	25-Jan-11	<0.050	**0.055**	<0.050	<0.050	**0.056**	<0.080	**0.076**	<0.050	<0.050	**0.072**	<0.050	**0.107**	**0.075**	<0.050	**1.26**	**0.135**	**0.116**	<0.050	**1.96**
P14-3I	Porewater EAZ	P14-3	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	28-Jan-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3I	Porewater EAZ	P14-3	---	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Jun-11	Insufficient Water for Analysis																		
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	11-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.015	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.24	<0.050	<0.050	<0.050	<0.31
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.198**	<0.050	<0.050	<0.050	---
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.18	<0.050	<0.050	<0.080	---
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.14	<0.28
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Apr-11	Not Sampled																		
P14-17S	Porewater EAZ	P14-17	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	19-Apr-11	Insufficient Water for Analysis																		
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.102**	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	**0.085**	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	20-Apr-11	Insufficient Water for Analysis																		
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	**0.098**	**0.100**	<0.050	<0.050	**0.106**	**0.065**	**0.081**	<0.050	**0.45**
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	14-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.073**	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
Reference Area																														
PEC-5S	Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Apr-11	<0.085	<0.050	<0.095	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.193**	<0.050	<0.050	<0.050	<0.23
PEC-5I	Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.085	<0.050	<0.050	<0.050	<0.22
PEC-5D	Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	---	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	20-Apr-11	Not Sampled																		
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-May-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I	Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	20-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.128**	<0.050	<0.050	<0.050	<0.21
PR2-8D	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	<0.50	<0.50	<0.50	<0.80	<2.0	**8.33**	**5.49**	<1.0	**3.76**	<6.0	<2.0	**2.57**	<0.50	<1.0	<6.0	<1.0	**14.2**	<0.50	**34.3**
PR2-8D	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Seawater																														
P3-3-O	Surface Water	P3-3	DCM	NA	WB	NA	NA	NA	---	---	9-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O	Surface Water	P3-3	DCM	NA	WB	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	NA	NA	NA	---	---	10-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	---	NA	EB	NA	NA	NA	---	---	27-Jan-11	Not Sampled																		
P6-3-O	Surface Water	P6-3	DCM	NA	EB	NA	NA	NA	---	---	9-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O	Surface Water	P6-12	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-12-O	Surface Water	P6-12	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O	Surface Water	P8-3	---	NA	EB	NA	NA	NA	---	---	27-Jan-11	Not Sampled																		
P8-3-O	Surface Water	P8-3	DCM	NA	EB	NA	NA	NA	---	---	9-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O	Surface Water	P8-3	DCM	NA	EB	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	---
P14-3-O	Surface Water	P14-3	DCM	NA	CL	NA	NA	NA	---	---	27-Jan-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ)[1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater)[1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02[5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG[2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P14-12-O	Surface Water	P14-12	DCM	NA	CL	NA	NA	NA	---	---	7-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR-2S	Surface Water	PR2	DCM	NA	RL	NA	NA	NA	---	---	8-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR-S-W	Surface Water	PEC	DCM	NA	RL	NA	NA	NA	---	---	7-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-3-O	Surface Water	PEC-3	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-12-O	Surface Water	PEC-12	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Field Duplicate/Equipment Blank/Travel Blank																														
DUP-2 (P8-12D)	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.16	<0.050	<0.050	<0.061	<0.26
DUP-2 (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-12-O)	Surface Water	P8-12	DCM	NA	EB	NA	NA	NA	---	---	8-Feb-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-3 (P14-17D)	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
DUP-4 (P6-3D) *	Porewater	P6-3	DCM	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	**0.590**	<0.10	<0.050	**0.066**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.567**	<0.050	**52.0**	**0.299**	<0.050	<0.79	**53.5**
DUP-4 (PR2-8D)	Porewater	PR2-8	---	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	Not Sampled																		
DUP-5 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (PR2-3-O)	Surface Water	PR2-3	DCM	NA	RL	NA	NA	NA	---	---	4-Jul-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-GW1 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Monitoring Samples																														
Western IRA Barrier																														
P2.5-7S	Porewater EAZ	P2.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	Insufficient Water for Analysis																		
P2.5-7S	Porewater EAZ	P2.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-13	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Dec-13	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Mar-14	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	10-Jun-14	Insufficient Water for Analysis																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Sep-14	Insufficient Water for Analysis																		
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	Insufficient Water for Analysis																		
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-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	<0.020	<0.010	<0.050	<0.083
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Sep-15	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	ot Sampled - Dry																		
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P2.5-7S	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P2.5-7S	Porewater EAZ	P2.5-7	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	ot Sampled - Dry																		
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	12-Dec-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.22
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	18-Jun-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.281**	<0.050	<0.050	<0.050	**0.28**
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	DCM	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0179**	<0.050	<0.050	<0.050	<0.050	**0.015**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P2.5-7I	Porewater EAZ	P2.5-7	Hexane	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0220**	**0.071**	<0.050	<0.050	**0.102**	<0.0050	**0.432**	**0.067**	<0.050	<0.050	**0.318**	**0.154**	<0.050	**1.17**
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	**0.076**	<0.050	<0.050	<0.050	<0.20
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P2.5-7D	Porewater	P2.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0056**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.106**	<0.050	<0.050	<0.050	**0.105**	<0.050	<0.050	**0.22**
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.089**	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.199**	<0.050	<0.050	<0.10	<0.22
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Apr-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.028**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.067**	<0.050	<0.050	<0.070	<0.050	**0.075**	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-12	<0.050	<0.050	<0.050	**0.052**	<0.050	**0.045**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.111**	<0.050	<0.050	<0.050	**0.152**	**0.129**	<0.050	**0.49**
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	<0.050	<0.050	<0.050	**0.053**	<0.050	**0.035**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.082** J	<0.050	<0.050	<0.050	**0.075** J	**0.093** J	<0.050	**0.34** J
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-13	<0.10	<0.050	<0.050	**0.104**	**0.131**	**0.140**	**0.158**	**0.085**	**0.069**	**0.154**	<0.050	**0.320**	<0.050	**0.071**	**0.089**	**0.309**	**0.392**	<0.050	**2.02**
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	<0.20	<0.050	<0.050	<0.050	<0.050	**0.034**	**0.056**	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.050	**0.061** J	**0.077**	<0.050	**0.29**
P3-3 +	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	<0.070	<0.050	<0.050	<0.050	<0.050	**0.016**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-AG +	Porewater	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	**0.02**	<0.05	<0.05	<0.05	<0.05	<0.05	**0.05**	<0.05	<0.05	<0.05	<0.05	**0.05**	<0.1	---
P3-3-MA +	Porewater	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Dec-13	<0.090	<0.050	<0.050	<0.050	<0.050	**0.038**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.093**	<0.050	<0.050	<0.050	**0.101**	**0.106**	<0.050	**0.34**
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	**0.077** J	<0.050 UJ	**0.03** J	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	**0.072** J	<0.050 UJ	<0.050 UJ	<0.050 UJ	**0.084** J	**0.087** J	<0.050 UJ	**0.35** J
P3-3-AG +	Porewater EAZ	P3-3	BC	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	**0.03**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.3**	**0.31**	<0.2	---
P3-3-MA +	Porewater EAZ	P3-3	BC	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.020	<0.10	<0.050	**0.021**	<0.24	<0.24
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Jun-14	<0.050	<0.050	<0.050	**0.082**	**0.109**	**0.102**	**0.124**	**0.096**	**0.050**	**0.119**	<0.050	**0.241**	<0.050	**0.067**	<0.050	**0.235**	**0.273**	<0.050	**1.50**

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-14	**0.072**	<0.050	<0.050	**0.181**	**0.232**	**0.225**	**0.241**	**0.158**	**0.109**	**0.26**	<0.050	**0.587**	**0.080**	**0.135**	<0.050	**0.671**	**0.632**	<0.050	**3.58**
P3-3	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	**0.030**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.095**	<0.050	<0.050	<0.050	**0.089**	**0.108**	<0.050	**0.32**
P3-3-B	Porewater EAZ	P3-3	DCM	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3	Porewater EAZ	P3-3	Hexane	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	**0.073**	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.139**	**0.055**	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-May-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.29
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Oct-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D-A @	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	---	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	ampled - Not Found																		
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-7D	Porewater	P3-7	Hexane	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-7D	Porewater	P3-7	---	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	ampled - Not Found																		
P3R-7S	Porewater EAZ	P3R-7	---	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	12-Sep-12	ll Destroyed																		
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	**0.096**	**0.068**	<0.050	<0.050	**0.22**
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.014**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.081**	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.069**	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.105**	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	17-Sep-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Dec-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7I	Porewater	P3R-7	---	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	1-Dec-14	ll Destroyed																		
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	Hexane	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Mar-16	ampled - Not Found																		
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-May-16	ampled - Not Found																		
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Aug-16	ampled - Not Found																		
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	22-Nov-16	ampled - Not Found																		
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	13-Mar-17	ampled - Not Found																		
P3R-7D	Porewater	P3R-7	---	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jun-17	ampled - Not Found																		
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	7-Jun-12	Insufficient Water for Analysis																		
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	ot Sampled - Dry																		
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.011**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	Insufficient Water for Analysis																		
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Dec-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	Insufficient Water for Analysis																		
P3-12S	Porewater EAZ	P3-12	DCM	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	Insufficient Water for Analysis																		
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	---	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-15	is - Insufficient water in well																		
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.071**	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	25-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12S	Porewater EAZ	P3-12	Hexane	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Oct-11	<0.050	<0.050	<0.060	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	6-Jun-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	18-Jun-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	DCM	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	25-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12D	Porewater	P3-12	Hexane	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.190**	**0.055**	<0.050	<0.050	**0.193**	<0.050	<0.050	**0.44**
P3.5-7S-R	Porewater EAZ	P3.5-7R	---	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Sep-12	ell Destroyed																		
P3.5-7S	Porewater EAZ	P3.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	6-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7S	Porewater EAZ	P3.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7S	Porewater EAZ	P3.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7S	Porewater EAZ	P3.5-7	DCM	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	**0.086**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Dec-12	<0.090	**0.114**	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.050	**0.068**	<0.050	<0.23
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.22
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.069**	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.094**	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3.5-7I +	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I-AG +	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P3.5-7I-MA +	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3.5-7I-AG +	Porewater	P3.5-7	BC	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<0.2	<0.2	<0.2	<0.2	<0.2	<0.04	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	**0.2**	**0.08**	<0.4	---
P3.5-7I-MA +	Porewater	P3.5-7	BC	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.020	<0.10	<0.050	<0.020	<0.24	<0.24
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	DCM	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	4-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.060	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.092**	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-7I	Porewater	P3.5-7	Hexane	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.054**	<0.050	<0.050	<0.050	**0.068**	<0.050	<0.050	<0.20
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.060 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-7D	Porewater	P3.5-7	Hexane	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.066**	<0.050	<0.050	<0.050	**0.064**	<0.050	<0.050	<0.20
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	25-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12S	Porewater EAZ	P3.5-12	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0132**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.119**	<0.050	<0.050	<0.050	**0.078**	**0.092**	<0.050	**0.30**
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	27-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	25-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12I	Porewater	P3.5-12	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	27-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D-AG +	Porewater	P3.5-12	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
P3.5-12D-MA +	Porewater	P3.5-12	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.020	<0.10	<0.050	<0.020	<0.24	<0.24
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	25-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.5-12D	Porewater	P3.5-12	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	20-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0188**	<0.050	<0.050	<0.050	<0.050	**0.0167**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3S	Porewater EAZ	P3.8-3	Hexane	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I +	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I-AG +	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.1	---
P3.8-3I-MA +	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3.8-3I-AG +	Porewater	P3.8-3	BC	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.2**	**0.23**	<0.2	---
P3.8-3I-MA +	Porewater	P3.8-3	BC	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.020	<0.10	<0.050	<0.020	<0.24	<0.24
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	DCM	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3I	Porewater	P3.8-3	Hexane	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 UJ	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3.8-3D	Porewater	P3.8-3	Hexane	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
Eastern IRA Barrier																														
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.070**	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	20-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.092**	<0.050	<0.050	**0.066**	**0.248**	**0.055**	<0.050	**0.46**
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S-AG +	Porewater EAZ	P4.2-3	BC	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
P4.2-3S-MA +	Porewater EAZ	P4.2-3	BC	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	DCM	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3S	Porewater EAZ	P4.2-3	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---	---
P4.2-3S	Porewater EAZ	P4.2-3	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---	---
P4.2-3S	Porewater EAZ	P4.2-3	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---	---
P4.2-3S	Porewater EAZ	P4.2-3	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---	---

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P4.2-3S	Porewater EAZ	P4.2-3	Hexane	CS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Mar-16	ell Destroyed																		
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.075**	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.081**	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	DCM	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.082**	<0.050	<0.050	<0.050	<0.050	**0.055**	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-1 (P4.2-3I)	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0233**	<0.050	<0.050	<0.050	<0.050	**0.0204**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-1 (P4.2-3I)	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	**0.05**	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	22-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	28-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	4-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	.	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-2	Hexane	CS	EB	2.6-3.1	2.6	3.0	Weathered Colluvium	---	12-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	---	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	10-Mar-15	with sand and gravel																		
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3D	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.2-3I	Porewater	P4.2-3	Hexane	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3D	Porewater	P4.2-3	---	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Feb-17	sampled - cap off																		
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	**0.16**	**0.209**	**0.0517**	<0.20	<0.050	<0.080	**0.349**	<0.0050	**1.03**	<0.050	<0.050	<0.050	**0.058**	**0.903**	<0.050	**2.76**
DUP-2 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5	Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	**0.141**	**0.177**	**0.0321**	**0.068**	<0.050	<0.050	**0.253**	<0.0050	**0.789**	<0.050	<0.050	<0.050	**0.057**	**0.626**	<0.050	**2.14**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	32%	---	26%	---	---	---	---	36%	---	25%
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Mar-17	<0.050	<0.050	<0.050	**0.064**	**0.053**	**0.0063**	<0.050	<0.050	<0.050	**0.065**	<0.0050	**0.48**	<0.050	<0.050	<0.050	<0.050	**0.372**	<0.050	**1.04**
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	22-Mar-17	<0.050	<0.050	<0.050	**0.141**	**0.102**	**0.0117**	<0.050	<0.050	<0.050	**0.134**	<0.0050	**0.662**	<0.050	<0.050	<0.050	<0.050	**0.504**	<0.050	**1.56**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	32%	---	---	---	---	30%	---	---
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	28-Mar-17	<0.050	<0.050	<0.050	**0.090**	**0.067**	**0.0121**	<0.050	<0.050	<0.050	**0.073**	<0.0050	**0.545**	<0.050	<0.050	<0.050	<0.050	**0.421**	<0.050	**1.21**
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	28-Mar-17	<0.050	<0.050	<0.050	**0.097**	**0.080**	**0.0175**	<0.050	<0.050	<0.050	**0.103**	<0.0050	**0.552**	<0.050	<0.050	<0.050	<0.050	**0.420**	<0.050	**1.27**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	1%	---	---	---	---	0%	---	5%
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.306**	<0.050	<0.050	<0.050	<0.050	**0.234**	<0.050	**0.6**
P4.2-3D-A	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.090**	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.20
DUP-1 (P4.2-3D-A)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	4-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.088**	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Apr-17	<0.050	<0.050	<0.050	**0.055**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.455**	<0.050	<0.050	<0.050	<0.050	**0.33**	<0.050	**0.84**
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Apr-17	<0.050	<0.050	<0.050	**0.136**	<0.050	**0.0058**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.487**	<0.050	<0.050	<0.050	<0.050	**0.349**	<0.050	**0.98**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	7%	---	---	---	---	6%	---	---
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	**0.099**	**0.103**	**0.0136**	<0.050	<0.050	<0.050	**0.12**	<0.0050	**0.886**	<0.050	<0.050	<0.050	<0.050	**0.658**	<0.050	**1.88**
DUP-1 (P4.2-3D)	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	**0.089**	**0.081**	**0.0108**	<0.050	<0.050	<0.050	**0.094**	<0.0050	**0.758**	<0.050	<0.050	<0.050	<0.050	**0.565**	<0.050	**1.6**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	16%	---	---	---	---	15%	---	16%
P4.2-3D	Porewater	P4.2-3	Hexane	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	**0.053**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.594**	<0.050	<0.050	<0.050	<0.050	**0.430**	<0.050	**1.08**
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.080	<0.050	<0.050	<0.29
P4.8-8S	Porewater EAZ	P4.8-8	---	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	Insufficient Water for Analysis																		
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	---	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Apr-12	Not Sampled																		
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-12	<0.30	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	**0.122**	<0.050	<0.050	<0.050	**0.130**	<0.10	<0.070	<0.050	<0.38
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.070	<0.050	**0.079**	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.018	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Nov-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-May-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Jun-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Sep-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.060	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.21
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.073**	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0213**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8S	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0132**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.125**	<0.050	<0.050	<0.050	**0.139**	**0.104**	<0.050	**0.38**
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.080	<0.050	<0.050	<0.29
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.016**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Apr-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.112**	<0.050	<0.050	<0.050	**0.113**	**0.077**	<0.050	**0.30**
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	**0.020**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.40	<0.45
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	**0.078**	**0.0854**	**0.108**	**0.06**	**0.091**	**0.094**	**0.0642**	**0.075**	<0.050	**0.068**	<0.050	<0.050	**0.098**	<0.050	**0.82**
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8I	Porewater EAZ	P4.8-8	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	---	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	Insufficient Water for Analysis																		
P4.8-8D	Porewater	P4.8-8	---	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	Not Sampled																		
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.29
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	**0.095**	**0.109**	**0.132**	**0.078**	**0.060**	**0.099**	<0.050	**0.271**	<0.050	**0.066**	<0.050	**0.297**	**0.281**	<0.050	**1.49**
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.104**	<0.050	<0.050	<0.050	<0.22
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Mar-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	<0.050	<0.22
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D-F F	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-13	**0.062**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D-F	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D +	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.8-8D-AG +	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.1	---
P4.8-8D-MA +	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D-AG +	Porewater	P4.8-8	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P4.8-8D-MA +	Porewater	P4.8-8	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	**0.011**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.064**	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.8-8D	Porewater	P4.8-8	---	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-Apr-17	ot sampled - Dry																		
P4.8-8D	Porewater	P4.8-8	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0080**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.069**	<0.050	<0.050	<0.050	**0.068**	**0.054**	<0.050	<0.20
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	**0.024**	**0.053**	<0.050	<0.050	**0.059**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Dec-12	**0.052**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.070**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Not Sampled																		
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.017**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.067**	<0.050	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	**0.020**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.289** J	**0.058**	<0.050	**0.059**	**0.163** J	**0.149** J	<0.050	**0.74** J
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	**0.256**	<0.050	<0.050	**0.198**	**0.200**	**0.050**	**0.140**	<0.050	**0.061**	**0.133**	<0.050	**1.45**	**0.197**	<0.050	<0.050	**0.717**	**0.709**	<0.050	**4.11**
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	<0.050	<0.050	<0.050	**0.050**	**0.060**	**0.021**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.402**	<0.050	<0.050	<0.050	**0.138**	**0.217**	<0.050	**0.89**
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	<0.050	<0.050	<0.050	**0.053**	**0.060**	**0.013**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.378**	<0.050	<0.050	<0.050	**0.106**	**0.184**	<0.050	**0.80**
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.073**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	**0.135**	<0.050	<0.050	**0.266**	**0.221**	**0.058**	**0.150**	<0.050	**0.061**	**0.135**	<0.050	**1.60**	**0.175**	<0.050	**0.176**	**0.168**	**0.902**	<0.050	**4.05**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	**0.107**	<0.050	<0.050	**0.166**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.626**	**0.127**	<0.050	<0.050	**0.057**	**0.389**	<0.050	**1.47**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Jun-15	**0.081**	<0.050	<0.050	**0.109**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.380**	<0.050	<0.050	<0.050	<0.050	**0.233**	<0.050	**0.80**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	**0.236**	<0.050	<0.050	**0.351**	**0.070**	**0.02**	<0.050	<0.050	<0.050	**0.121**	<0.050	**0.987**	<0.050	<0.050	<0.050	<0.050	**0.618**	<0.050	**2.40**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	**0.156**	<0.050	<0.050	**0.072**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.183**	<0.050	<0.050	<0.050	**0.070**	**0.104**	<0.050	0.58
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.232**	<0.050	<0.050	<0.050	<0.050	**0.140**	<0.050	**0.43**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	**0.078**	<0.050	<0.050	**0.064**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.186**	<0.050	<0.050	<0.050	<0.050	**0.117**	<0.050	**0.45**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Dec-16	**0.871**	<0.050	<0.050	**0.520**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.858**	<0.050	<0.050	<0.050	<0.050	**0.530**	<0.050	2.78
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jan-17	**0.773**	<0.050	<0.060	**0.524**	<0.070	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**1.08**	<0.050	<0.050	<0.050	<0.050	**0.645**	<0.050	**3.02**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Feb-17	**1.79**	<0.050	<0.20	**1.10**	**0.088**	**0.0088**	<0.050	<0.050	<0.050	<0.050	<0.0050	**2.43**	<0.050	<0.050	<0.050	<0.050	**1.43**	<0.050	**6.86**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	**0.086**	<0.050	<0.050	**0.09**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.242**	<0.050	<0.050	<0.050	<0.050	**0.171**	<0.050	0.59
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Apr-17	**0.385**	<0.050	<0.050	**0.327**	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.947**	**0.115**	<0.050	<0.050	<0.050	**0.589**	<0.050	**2.36**
P4.9-5	Porewater EAZ	P4.9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	6-Jun-17	**0.055**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.066**	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.20
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	DCM	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	2-Dec-14	**0.074**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.085**	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.092**	<0.050	<0.050	<0.050	**0.081**	**0.051**	<0.050	**0.22**
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.275**	**0.052**	<0.050	<0.050	**0.199**	**0.157**	<0.050	**0.68**
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.228**	<0.050	<0.050	<0.050	**0.086**	**0.135**	<0.050	**0.45**
DUP-3 (P4.9-12S)	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.307**	<0.050	<0.050	<0.050	**0.108**	**0.178**	<0.050	**0.59**
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.271**	<0.050	<0.050	<0.050	**0.089**	**0.158**	<0.050	0.52
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.099**	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.20
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.264**	<0.050	<0.050	<0.050	<0.050	**0.168**	<0.050	0.43
P4.9-12S	Porewater EAZ	P4.9-12	Hexane	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.160**	<0.050	<0.050	<0.050	**0.100**	**0.069**	<0.050	**0.33**
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	DCM	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.9-12I	Porewater	P4.9-12	Hexane	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	27-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	DCM	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P4.9-12D)	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5	Colluvium	Weathered Colluvium	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P4.9-12D	Porewater	P4.9-12	Hexane	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11	Insufficient Water for Analysis																		
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Nov-11	Not Sampled																		
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.064**	<0.050	<0.40	<0.050	<0.050	<0.20	<0.49
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.014**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jul-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	Insufficient Water for Analysis																		
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	ot Sampled - Dry																		
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	25-Feb-13	Not Sampled																		
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.107**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.083**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Sep-14	Insufficient Water for Analysis																		
P5-3S	Porewater EAZ	P5-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.50	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<5.0	<5.0
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0071**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0079**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3S	Porewater EAZ	P5-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0260**	**0.052**	<0.050	<0.050	<0.050	**0.0056**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	**0.467**	<0.050	<0.050	<0.050	**0.47**
P5-3I	Porewater EAZ	P5-3	---	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Oct-11	Not Sampled																		
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.013	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.035**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.090**	<0.050	<0.050	<0.050	**0.130**	**0.083**	<0.050	**0.34**
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.055**	<0.050	**0.280**	**0.122**	<0.050	<0.050	**0.46**
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.267**	<0.050	<0.050	<0.050	**0.27**
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P5-3I-AG +	Porewater EAZ	P5-3	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
P5-3I-MA +	Porewater EAZ	P5-3	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	**0.050**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Dec-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.263**	<0.050	<0.050	<0.050	<0.050	**0.207**	<0.050	0.47
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.165**	<0.050	<0.050	<0.050	<0.050	**0.131**	<0.050	**0.30**
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0063**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.164**	<0.050	<0.050	<0.050	<0.050	**0.141**	<0.050	**0.31**
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-3I	Porewater EAZ	P5-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	**0.093**	<0.050	<0.050	**0.122**	**0.196**	**0.106**	**0.234**	<0.050	**0.090**	**0.211**	**0.0136**	**0.789**	**0.160**	<0.050	<0.050	**0.657**	**0.635**	<0.050	**3.31**
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	28-Sep-11	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	**0.527**	<0.050	<0.050	<0.050	**0.53**
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	<0.090	<0.050	<0.050	<0.050	<0.050	**0.022**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.079**	**0.055**	<0.050	**0.068**	**0.166**	**0.073**	<0.050	**0.46**
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jul-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.50	<0.54
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.29
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	25-Feb-13	Not Sampled																		
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.22
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	Hexane	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D	Porewater	P5-3	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Mar-16	Sampled - Infilled																		
P5-3D	Porewater	P5-3	---	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-May-16	ell Destroyed																		
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Dec-11	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.056**	<0.050	**0.102**	**0.071**	<0.050	<0.050	**0.23**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Apr-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.126**	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-May-12	**0.056**	**0.068**	<0.050	<0.050	**0.051**	<0.060	**0.056**	<0.050	<0.050	<0.050	<0.050	**0.140**	**0.060**	<0.050	<0.050	**0.221**	**0.156**	<0.050	**0.81**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.080	**0.163**	**0.084**	**0.141**	<0.050	<0.15	<0.050	**0.082**	<0.050	<0.050	**0.102**	**0.188**	**0.236**	<0.050	**1.00**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	<0.20	<0.050	<0.050	<0.050	<0.090	**0.300**	**0.145**	**0.187**	<0.050	<0.070	<0.080	<0.10	<0.050	<0.050	<0.060	<0.050	**0.433**	<0.050	**1.06**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	<0.070	<0.050	<0.050	<0.050	<0.050	**0.016**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.050	<0.050	**0.076**	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.141**	<0.050	<0.050	<0.050	<0.22
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Nov-12	<0.090	<0.050	<0.050	<0.050	<0.20	**0.418**	**0.218**	**0.283**	<0.050	<0.080	<0.090	**0.136**	<0.050	**0.065**	<0.060	<0.090	**0.624**	<0.050	**1.74**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	**0.079**	**0.137**	**0.241**	**0.165**	**0.260**	**0.064**	<0.20	**0.056**	**0.281**	**0.050**	**0.071**	**0.061**	**0.280**	**0.372**	<0.050	**2.12**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.012**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.136**	**0.063**	**0.091**	<0.050	<0.080	<0.050	<0.050	<0.050	<0.050	**0.067**	<0.050	**0.180**	<0.050	**0.54**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.037**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.070**	**0.056**	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	<0.20	<0.050	<0.050	<0.050	<0.050	**0.026**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	**0.051**	<0.050	<0.28
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	**0.056**	<0.050	**0.065**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	**0.100**	<0.050	**0.22**
P5-7S	Porewater EAZ	P5-7	---	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	Insufficient Water for Analysis																		
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14	<0.050	**0.098**	<0.050	**0.156**	**0.531**	**0.368**	**0.472**	**0.333**	**0.205**	**0.563**	**0.066**	**1.24**	**0.058**	**0.318**	**0.081**	**0.556**	**1.15**	<0.050	**6.20**
P5-7S	Porewater EAZ	P5-7	DCM	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.068**	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	**0.047**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0117**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7S	Porewater EAZ	P5-7	Hexane	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0088**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.118**	<0.050	<0.050	<0.050	**0.085**	**0.082**	<0.050	**0.29**
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-May-12	<0.050	**0.066**	<0.050	**0.100**	**0.059**	**0.058**	**0.069**	<0.050	<0.050	**0.060**	<0.050	**0.134**	**0.067**	<0.050	**0.057**	**0.237**	**0.120**	<0.050	**1.03**
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.173**	**0.095**	<0.050	<0.050	**0.27**
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	DCM	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7I	Porewater EAZ	P5-7	Hexane	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0068**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.078**	<0.050	<0.050	<0.050	**0.090**	**0.059**	<0.050	**0.23**
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.079**	**0.056**	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-May-12	**0.072**	**0.131**	<0.050	**0.132**	**0.122**	**0.131**	**0.153**	**0.083**	**0.069**	**0.129**	<0.050	**0.262**	**0.093**	**0.085**	**0.083**	**0.342**	**0.229**	<0.050	**2.11**
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	<0.050	**0.058**	<0.050	<0.050	**0.062**	**0.058**	**0.118**	<0.050	**0.058**	**0.056**	<0.050	**0.096**	<0.050	<0.050	<0.050	**0.106**	**0.090**	<0.050	**0.70**
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.069**	<0.050	<0.050	<0.050	<0.22
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P5-7D +	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P5-7D-AG +	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.1	---
P5-7D-MA +	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D-AG +	Porewater	P5-7	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P5-7D-MA +	Porewater	P5-7	BC	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	**0.015**	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	DCM	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ)[1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater)[1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02[5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG[2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5-7D	Porewater	P5-7	Hexane	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.107**	<0.050	<0.050	<0.050	**0.107**	**0.085**	<0.050	**0.30**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	<0.40	<0.070	<0.070	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.497**	<0.050	**35.2**	**0.286**	<0.050	<0.60	**36.0**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	14-Sep-12	**0.132**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.258**	<0.050	**20.1**	**0.222**	<0.050	<0.25	**20.7**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.40	<0.070	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.527**	<0.050	**45.1**	**0.303**	<0.050	<0.60	---
P5.25-3	Porewater EAZ	P5.25-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.50	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.716**	<0.050	**74.8**	**0.444**	**0.059**	<0.70	---
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	**0.563**	<0.20	<0.10	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.873**	<0.050	**53.4**	**0.468**	**0.053**	<0.80	**55.3**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	<0.60	<0.20	<0.20	<0.070	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.893**	<0.050	**49.0**	**0.723**	**0.168**	<0.80	**50.7**
P5.25-3 +	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	**0.494**	<0.20	<0.090	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.773**	<0.050	**57.3**	**0.492**	**0.088**	<0.90	**59.1**
P5.25-3-AG +	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.24**	<0.05	<0.05	<0.05	**0.07**	<0.1	---
P5.25-3-MA +	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	**0.47**	<0.050	<0.050	<0.050	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	**0.047**	**1.1**	<0.050	**52**	**0.60**	**0.094**	<0.50	**78**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Dec-13	**0.494**	<0.20	<0.20	<0.060	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.80	<0.050	**40.8**	<0.60	**0.108**	<0.90	**41.4**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.60	<0.20	<0.080	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.735**	<0.050	**59.7**	**0.444**	**0.058**	<2.0	**60.9**
P5.25-3-AG +	Porewater EAZ	P5.25-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.6**	<0.1	**39**	**0.4**	**0.04**	<0.2	---
P5.25-3-MA +	Porewater EAZ	P5.25-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	**0.39**	<0.050	<0.050	**0.039**	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	**0.03**	**0.8**	<0.050	**41**	**0.51**	**0.068**	<0.24	**62**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	<0.50	<0.10	<0.090	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.693**	<0.050	**58.4**	**0.475**	**0.079**	<0.90	**59.7**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	**0.422**	**0.076** J	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.560**	<0.050	**27.1**	**0.421**	**0.118**	<0.050	**28.7**
P5.25-3	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	**0.587**	<0.10	<0.050	<0.070	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.772**	<0.050	**34.7**	**0.505**	**0.108**	<0.80	**36.7**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	**0.451**	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.717**	<0.050	**27.1**	**0.45**	**0.123**	<2.0	**28.8**
P5.25-3-B	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	**0.336**	<0.060	<0.010	<0.040	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	**0.024**	**0.454**	<0.010	**20.7**	**0.281**	**0.082**	<2.0	**21.9**
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	**0.331**	<0.060	<0.010	<0.040	<0.010	<0.010	<0.010	<0.010	<0.010	<0.020	<0.010	**0.025**	**0.430**	<0.010	**17.0**	**0.274**	**0.086**	<2.0	**21.1**
QA/QC RPD											**Duplicates**	**1%**	---	---	---	---	---	---	---	---	---	---	---	**5%**	---	**20%**	**3%**	---	---	**4%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	**0.447**	<0.090	<0.050	<0.070	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.749**	<0.050	**18**	**0.533**	**0.145**	<2.0	**19.9**
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	**0.414**	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.654**	<0.050	**17.4**	**0.482**	**0.130**	<2.0	**19.1**
QA/QC RPD											**Duplicates**	**8%**	---	---	---	---	---	---	---	---	---	---	---	**14%**	---	**3%**	**10%**	---	---	**4%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	**0.48**	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.658**	<0.050	**19.8**	**0.366**	**0.066**	<3.0	**21.4**
DUP-7 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	**0.456**	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.647**	<0.050	**22.4**	**0.346**	**0.053**	<3.0	**23.9**
QA/QC RPD											**Duplicates**	**5%**	---	---	---	---	---	---	---	---	---	---	---	**2%**	---	**12%**	**6%**	---	---	**11%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	**0.516**	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.786**	<0.050	**35.9**	**0.511**	**0.086**	<4.0	**37.8**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	<0.60	<0.20	<0.20	<0.10	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.09**	<0.050	**19.5**	**0.693**	**0.129**	<4.0	21.4
DUP-5 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	<0.60	<0.20	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.679**	<0.050	**18.3**	**0.437**	**0.135**	<4.0	19.6
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	**46%**	---	**6%**	**45%**	---	---	**9%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	**0.477**	<0.080	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.662**	<0.050	**1.66**	**0.430**	**0.089**	<2.0	**3.3**
DUP-1 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	**0.486**	<0.080	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.791**	<0.050	**1.87**	**0.500**	**0.086**	<2.0	**3.7**
QA/QC RPD											**Duplicates**	**2%**	---	---	---	---	---	---	---	---	---	---	---	**18%**	---	**12%**	**15%**	---	---	**11%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	**0.509**	<0.090	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.685**	<0.050	<2.0	**0.370**	**0.076**	<4.0	<4.5
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	**0.39**	<0.090	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.602**	<0.050	**12.1**	**0.394**	**0.076**	<4.0	13.6
DUP-4 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	**0.405**	<0.090	<0.20	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.568**	<0.050	**15.4**	**0.329**	**0.071**	<3.0	16.7
QA/QC RPD											**Duplicates**	**4%**	---	---	---	---	---	---	---	---	---	---	---	**6%**	---	**24%**	**18%**	---	---	**20%**
P5.25-3	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.404**	<0.090	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.628**	<0.050	**16.7**	**0.352**	<0.050	<5.0	**18.1**
DUP-6 (P5.25-3)	Porewater EAZ	P5.25-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.405**	<0.10	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.682**	<0.050	**16.3**	**0.393**	<0.050	<4.0	**17.8**
QA/QC RPD											**Duplicates**	**0%**	---	---	---	---	---	---	---	---	---	---	---	**8%**	---	**2%**	**11%**	---	---	**2%**
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	---
P5.25-5	Porewater EAZ	P5.25-5	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Not Sampled																		
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	4-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jun-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	<0.020	<0.010	<0.050	<0.083
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5.25-5	Porewater EAZ	P5.25-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.057**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P5.5-3	Porewater EAZ	P5.5-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	<0.20	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.384**	<0.050	**31.4**	**0.189**	<0.050	<0.40	**32.0**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Apr-12	<2.0	<0.40	<2.0	<0.40	<0.080	<0.080	<0.20	**0.082**	<0.050	<0.10	<0.050	<0.20	**1.81**	<0.050	**47.2**	**2.19**	**0.800**	<3.0	**52.1**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-May-12	<0.30	<0.070	<0.30	<0.10	<0.050	**0.039**	<0.050	<0.050	<0.050	**0.050**	<0.050	**0.079**	**0.346**	<0.050	**43.5**	**0.482**	**0.205**	<0.80	**44.7**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.144**	<0.050	**53.2**	**0.182**	**0.053**	<0.70	**53.6**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	<0.30	<0.070	<0.090	<0.060	<0.050	**0.012**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.282**	<0.050	**53.2**	**0.397**	**0.155**	<0.75	**54.1**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	**0.070**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.081**	<0.050	**22.6**	**0.089**	<0.050	<0.30	**22.9**
P5.5-3R	Porewater EAZ	P5.5-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	Insufficient Water for Analysis																		
P5.5-3R	Porewater EAZ	P5.5-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	Insufficient Water for Analysis																		
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.103**	<0.050	**45.4**	**0.107**	<0.050	<0.60	**45.6**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.15	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.080**	<0.050	**29.6**	**0.052**	<0.050	<0.40	---
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	**0.162**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.109**	<0.050	**49.2**	<0.050	<0.050	<0.070	**49.5**
P5.5-3R	Porewater EAZ	P5.5-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.103**	<0.050	**45.7**	<0.050	<0.050	<0.050	---
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	**0.212**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.138**	<0.050	**56.5**	<0.050	<0.050	<0.60	**56.9**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	<0.30	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.176**	<0.050	**23.9**	**0.075**	<0.050	<0.50	**24.1**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	**0.314**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.386**	<0.050	**60.6**	<0.070 U	<0.050	<0.70	**61.3**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-14	<0.40	<0.10	<0.050	<0.050	<0.050	**0.014**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.056**	**0.494**	<0.050	**44**	**0.097**	**0.081**	<0.60	**44.7**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	<0.50	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.587**	<0.050	**62.1**	**0.090**	<0.050	<0.70	**62.8**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	**0.362**	<0.080	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.466**	<0.050	**40.2**	**0.125**	<0.050	**0.424**	**41.6**
P5.5-3R	Porewater EAZ	P5.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	**0.44**	<0.10	<0.10	<0.10	<0.10	<0.020	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	**0.61**	<0.10	**53.2**	**0.10**	<0.10	<0.80	**54.4**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	**0.390**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.393**	<0.050	**41.3**	**0.118**	<0.050	<3.0	**42.2**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	**0.320**	<0.060	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.314**	<0.010	**36.2**	**0.049**	**0.013**	**1.01**	**38.1**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	**0.371**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.393**	<0.050	**43.6**	**0.073**	<0.050	<2.0	**44.4**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	**0.369**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.376**	<0.050	**42.3**	**0.052**	<0.050	<2.0	**43.1**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	**0.370**	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.388**	<0.050	**44.4**	**0.06**	<0.050	<3.0	**45.2**
DUP-7 (P5.5-3R)	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	**0.380**	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.424**	<0.050	**42.1**	**0.067**	<0.050	<3.0	**42.9**
QA/QC RPD											**Duplicates**	**3%**	---	---	---	---	---	---	---	---	---	---	---	**9%**	---	**5%**	---	---	---	**5%**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	<0.50	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.455**	<0.050	**44.4**	**0.075**	<0.050	<0.20	44.9
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	**0.398**	<0.070	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.453**	<0.050	**26.8**	**0.086**	<0.050	<3.0	**27.7**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	**0.398**	<0.090	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.457**	<0.050	**41.0**	**0.063**	<0.050	<4.0	**41.9**
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	**0.39**	<0.090	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.517**	<0.050	**29**	**0.063**	<0.050	<4.0	29.9
P5.5-3R	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.508**	<0.090	<0.050	<0.050	<0.050	**0.0124**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.103**	**0.693**	<0.050	**31.4**	**0.208**	**0.116**	<4.0	**33.1**
DUP-5 (P5.5-3R)	Porewater EAZ	P5.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.518**	**0.093**	<0.050	<0.050	<0.050	**0.0084**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.108**	**0.695**	<0.050	**33.7**	**0.204**	**0.118**	**3.12**	**38.5**
QA/QC RPD											**Duplicates**	**2%**	---	---	---	---	---	---	---	---	---	---	---	**0%**	---	**7%**	---	---	---	**15%**
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.080	<0.29
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jul-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-12	<0.070	<0.050	<0.050	<0.050	<0.050	**0.015**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.22
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Oct-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.070	<0.29
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-12	<0.15	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	---
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Jan-13	<0.090	<0.050	<0.050	<0.050	<0.050	**0.022**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.050**	<0.10	<0.050	<0.20	<0.050	<0.050	<0.070	<0.31
P6-8S	Porewater EAZ	P6-8	---	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	Not Sampled																		
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.031**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.070	---
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-May-13	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Jun-13	<0.060	<0.050	<0.050	**0.166**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	**0.054**	<0.050	<0.050	<0.25
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Sep-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.070	<0.050	<0.080	<0.30
P6-8S +	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	**0.072**	<0.050	**0.020**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	**0.072**	<0.050	<0.050	<0.28
P6-8S-AG +	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-13	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.02 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.04 UJ	<0.2 UJ	---
P6-8S-MA +	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1	Weathered Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	**0.038** J+	**0.010** J+	**0.012** J+	<0.050 c	<0.050	<0.050	<0.050	<0.050	**0.19** J+	<0.050	<0.050	<0.10	**0.15** J+	**0.15** J+	<0.50	**0.56** J+
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Dec-13	<0.10	<0.050	<0.050	<0.050	<0.050	**0.026**	<0.050	**0.083**	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	**0.182**	**0.121**	**0.094**	<0.050	**0.51**
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P6-8S-AG +	Porewater EAZ	P6-8	BC	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P6-8S-MA +	Porewater EAZ	P6-8	BC	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	**0.016**	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	**0.024**	<0.050	<0.050	<0.10	<0.050	**0.023** J	<0.24	<0.24
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8S	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S-B	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.060	<0.28
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.2**	<0.050	<0.050	<0.30	**0.108**	**0.163**	<0.20	**0.53**
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.050	<0.050	<0.050	**0.06**	<0.050	<0.21
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.116**	<0.050	<0.050	<0.20	<0.050	**0.145**	<0.10	<0.30
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.112**	<0.050	<0.050	<0.070	<0.050	**0.096**	<0.050	**0.26**
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.175**	<0.050	<0.050	<0.050	<0.050	**0.168**	<0.050	0.34
P6-8S	Porewater EAZ	P6-8	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0068**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.099**	<0.050	<0.050	**0.085**	**0.068**	**0.089**	<0.050	**0.35**
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.164**	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.619**	<0.050	<0.050	<0.050	**0.62**
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.732**	<0.050	<0.050	<0.050	**0.73**
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.225**	<0.050	<0.050	<0.050	**0.22**
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.173**	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Not Sampled																		
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.085**	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	**0.069**	**0.060**	**0.063**	<0.050	<0.050	<0.050	**0.058**	<0.050	<0.050	<0.050	<0.050	**0.069**	<0.050	**0.32**
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-8I	Porewater	P6-8	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.092**	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	**0.063**	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.018**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	**0.075**	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Aug-12	<0.10	<0.050	<0.050	<0.050	<0.050	**0.014**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	---	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	25-Feb-13	Not Sampled																		
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.21
DUP-3 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4	4.4	Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.070**	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4	4.4	Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-1 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4	4.4	Colluvium	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-2 (P6-8D)	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4	4.4	Colluvium	---	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-8D	Porewater	P6-8	Hexane	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.29
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S	Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]		Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]													6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]													6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source													BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]													---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	DCM	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	4-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	0.011	<0.010	<0.020	<0.010	0.041	0.060	<0.010	<0.050	0.033	0.031	<0.050	0.189
P6-12S		Porewater EAZ	P6-12	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Sep-15	Not Sampled - Dry																		
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12S		Porewater EAZ	P6-12	Hexane	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.150	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	0.052	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.137	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	<0.25
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I [6]		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-14	<0.50	<0.50	<0.50	<0.50	<0.50	<0.10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.1
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	DCM	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.22
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.072	<0.050	<0.050	<0.050	<0.21
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.22
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P6-12I		Porewater EAZ	P6-12	Hexane	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	5-Jun-17	0.086	<0.050	<0.050	0.104	0.196	0.0812	0.126	<0.050	0.059	0.207	0.0096	0.889	0.151	<0.050	<0.050	0.644	0.703	<0.050	3.26
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.063	0.059	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	DCM	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12D		Porewater	P6-12	Hexane	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	0.0096	<0.050	<0.050	<0.050	<0.050	<0.0050	0.186	<0.050	<0.050	<0.050	0.107	0.143	<0.050	0.45
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	<0.30	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.215	<0.050	31.3	0.088	<0.050	<0.40	31.6
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	<0.15	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.144	<0.050	24.2	0.066	<0.050	<0.30	24.4
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	3.27	<0.050	<0.050	<0.15	---
P6.25-3		Porewater EAZ	P6.25-3	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.115	<0.050	17.5	<0.050	<0.050	<0.40	---
P6.25-3A	~	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<0.30	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.233	<0.050	39.5	0.092	<0.050	<0.40	39.8
P6.25-3B	~	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.26	<0.050	<0.050	<0.050	1.26
P6.25-3C	~	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.229	<0.050	32.8	0.088	<0.050	<0.40	33.2
P6.25-3D	~	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	0.302	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.355	<0.050	43.7	0.145	<0.050	<0.50	44.5
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	<0.40	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.345	<0.050	35.0	0.201	<0.050	<0.50	35.6
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Dec-13	0.176	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.232	<0.050	35.4	0.107	<0.050	<0.50	35.9
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	3.43	<0.050	<0.050	<0.20	3.43
P6.25-3-AG	+	Porewater EAZ	P6.25-3	BC	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.7	<0.1	<0.04	<0.2	---
P6.25-3-MA	+	Porewater EAZ	P6.25-3	BC	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.050	<0.050	<0.050	0.013	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	3.1	<0.050	<0.020	<0.24	3.8
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	13-Jun-14	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.074	<0.050	13.4	<0.050	<0.050	<0.40	13.5
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	<0.20 UJ	<0.80 UJ	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.118	<0.050	11	0.085	<0.050	<0.40	11.2
P6.25-3		Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.059	<0.050	2.73	<0.050	<0.050	<0.050	2.79
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.532	<0.050	<0.050	<0.80	<0.82
DUP-5 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.506	<0.050	<0.050	<0.80	<0.82
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5%	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-Jun-15	0.061	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.076	<0.010	2.5	0.050	<0.010	<2.0	2.7
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	0.067	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.074	<0.050	4.23	0.052	<0.050	<1.0	4.4
DUP-7 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	0.062	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.064	<0.050	6.65	0.050	<0.050	<1.0	6.8
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	44%	---	---	---	43%
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.056	<0.050	1.24	<0.050	<0.050	<1.0	1.4
DUP-6 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	0.059	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.057	<0.050	1.15	<0.050	<0.050	<0.90	1.27
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8%	---	---	---	10%
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.665	<0.050	<0.050	<0.20	0.67
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.414	<0.050	<0.050	<0.50	<0.54
DUP-3 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.403	<0.050	<0.050	<0.50	<0.54
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3%	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	1.12	<0.050	<0.050	<0.50	1.12
DUP-2 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	0.824	<0.050	<0.050	<0.60	0.82
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	30%	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	1.49	<0.050	<0.050	<0.80	1.49
DUP-8 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	1.38	<0.050	<0.050	<0.60	1.38
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8%	---	---	---	8%
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.60	<0.70
DUP-6 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.30	0.057	0.05	<0.50	<0.61
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.25-3		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.60	<0.70
DUP-4 (P6.25-3)		Porewater EAZ	P6.25-3	Hexane	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.60	<0.66
QA/QC RPD												Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.178	<0.050	25.9	0.078	<0.050	<0.50	26.2
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.165	<0.050	18.9	0.070	<0.050	<0.30	19.2
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.40	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.381	<0.050	38.6	0.149	<0.050	<0.60	---
P6.5-3		Porewater EAZ	P6.5-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.30	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.246	<0.050	31.6	0.077	<0.050	<0.50	---
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	0.376	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.487	<0.050	29.3	0.203	<0.050	<0.55	30.4
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	<0.30	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.337	<0.050	22.0	0.138	<0.050	<0.60	22.5

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]		Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]													6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]													6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source													BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]													---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	**0.166**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.242**	<0.050	**7.40**	<0.20 U	<0.050	<0.50	**7.81**
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.30	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.352**	<0.050	**20.9**	**0.139**	<0.050	<0.70	**21.4**
P6.5-3-AG	+	Porewater EAZ	P6.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	**0.2**	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.3**	<0.1	**13**	**0.1**	<0.04	<0.2	---
P6.5-3-MA	+	Porewater EAZ	P6.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	**0.26**	<0.050	<0.050	**0.023**	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	**0.41**	<0.050	**15**	**0.16**	<0.020	<0.24	**16**
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	<0.40	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.489**	<0.050	**18.8**	**0.184**	<0.050	<0.80	**19.5**
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	**0.42** J	<0.10 UJ	<0.10 UJ	<0.10 UJ	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.50** J	<0.050	<4.0	**0.23** J	<0.050	<0.70 UJ	<4.1
P6.5-3		Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	<0.20	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.163**	<0.050	**2.52**	**0.114**	<0.050	<0.070	**2.80**
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.392**	<0.050	<0.050	<0.40	<0.45
DUP-8 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.402**	<0.050	<0.050	<0.40	<0.45
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**3%**	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.70	<0.050	<0.050	<0.30	<0.79
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.70	<0.050	<0.050	<0.30	<0.79
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	**0.148**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.189**	<0.050	**4.56**	**0.102**	<0.050	<2.0	**5.0**
DUP-6 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	**0.174**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.206**	<0.050	**5.33**	**0.117**	<0.050	<2.0	**5.8**
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**16%**	---	---	---	**15%**
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	**0.132**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.153**	<0.050	<0.20	**0.070**	<0.050	**0.826**	**1.18**
DUP-5 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	**0.130**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.158**	<0.050	<0.40	**0.065**	<0.050	<2.0	<2.0
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	**0.275**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.284**	<0.050	<2.0	**0.081**	<0.050	<3.0	<3.6
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	**0.238**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.216**	<0.050	<2.0	**0.060**	<0.050	<2.0	<2.8
DUP-4 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	**0.186**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.187**	<0.050	<1.0	<0.050	<0.050	<2.0	<2.2
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	**0.196**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.212**	<0.050	<0.30	**0.062**	<0.050	<2.0	<2.0
DUP-3 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	**0.197**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.224**	<0.050	<0.20	**0.066**	<0.050	<2.0	<2.0
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	**0.225**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.296**	<0.050	<1.0	**0.134**	<0.050	<3.0	<3.2
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	**0.275**	<0.070	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.333**	<0.050	<1.0	**0.130**	<0.050	<3.0	<3.2
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	**12%**	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	**0.058**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.078**	<0.050	<0.30	<0.050	<0.050	<0.70	<0.78
DUP-7 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	**0.052**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.069**	<0.050	<0.30	<0.050	<0.050	<0.60	<0.70
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.5-3		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.154**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.178**	<0.050	<0.80	<0.050	<0.050	<3.0	<3.1
DUP-3 (P6.5-3)		Porewater EAZ	P6.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	**0.154**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.172**	<0.050	<0.80	<0.050	<0.050	<3.0	<3.1
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6.75-3		Porewater EAZ	P6.75-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	<0.50	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.386**	<0.050	**51.9**	**0.157**	<0.050	<0.70	**52.4**
P6.75-3		Porewater EAZ	P6.75-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	<0.15	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.124**	<0.050	**19.4**	<0.050	<0.050	<0.30	**19.5**
P6.75-3		Porewater EAZ	P6.75-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.40	<0.070	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.357**	<0.050	**44.7**	**0.159**	<0.050	<0.50	---
P6.75-3		Porewater EAZ	P6.75-3	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P6.75-3		Porewater EAZ	P6.75-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	**6.04**	<0.050	<0.050	<0.20	---
P6.75-3		Porewater EAZ	P6.75-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.074**	<0.050	<0.050	<0.050	<0.21
P6.75-3		Porewater EAZ	P6.75-3	---	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	ell Destroyed																		
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	6-Dec-11	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.64**	<0.050	<0.050	<0.50	**1.64**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jan-12	<0.20	<0.050	<0.080	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	**3.79**	<0.050	<0.050	<0.90	**3.79**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Feb-12	<0.20	<0.050	<0.20	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	**3.51**	**0.060**	<0.050	<1.0	**3.6**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-12	**0.062**	<0.050	**0.055**	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.21**	<0.050	<0.050	<0.60	**3.32**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Apr-12	<0.60	<0.30	<0.70	<0.20	<0.050	<0.20	<0.20	**0.073**	<0.050	<0.050	<0.050	<0.090	**0.432**	<0.050	**7.32**	<0.40	<0.090	<4.0	**7.8**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.64**	<0.050	<0.050	<0.30	**1.64**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	5-Jun-12	<0.20	<0.20	<0.20	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<5.0	<0.050	<0.050	<0.90	<5.1
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jul-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.90**	<0.050	<0.050	<0.60	**3.90**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.82**	<0.050	<0.050	<0.40	**1.82**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.08**	<0.050	<0.050	<0.15	**1.08**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Oct-12	<0.080	<0.20	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.56**	<0.050	<0.050	<0.30	**1.56**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.59**	<0.050	<0.050	<0.50	**3.59**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4.10**	<0.070	**0.094**	<0.35	---
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4.10**	<0.050	<0.050	<0.050	**4.10**
P7-3		Porewater EAZ	P7-3	---	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	25-Feb-13	Not Sampled																		
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**6.27**	<0.050	<0.050	<0.60	---
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Jun-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**5.55**	<0.050	<0.050	<0.50	**5.55**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Sep-13	<0.080	<0.050	<0.20	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	**4.91**	<0.050	<0.050	<0.40	**4.91**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**6.12**	<0.050	<0.050	<0.50	**6.12**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**10.6**	<0.050	<0.050	<0.60	**10.6**
P7-3-AG	+	Porewater EAZ	P7-3	BC	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**7**	<0.1	<0.04	<0.2	---
P7-3-MA	+	Porewater EAZ	P7-3	BC	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	**9.7**	**0.09**	**0.039**	<0.24	**12**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**5.28**	<0.050	<0.050	<0.50	**5.28**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-14	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4.41**	<0.050	<0.050	<0.40	**4.41**
P7-3		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	3-Dec-14	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**8.21**	<0.050	<0.050	<0.60	**8.21**
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	**0.057**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.24**	<0.050	<0.050	<2.0	**3.3**
P7-3-B		Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.08**	<0.050	<0.050	<0.50	**3.08**
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	**0.053**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.46**	<0.050	<0.050	<0.90	**1.52**
DUP-6 (P7-3)		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.48**	<0.050	<0.050	<0.80	**1.56**
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**1%**	---	---	---	**3%**
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	11-Sep-15	**0.059**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**2.02**	<0.050	<0.050	<0.90	**2.08**
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-Dec-15	**0.056**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<3.0	<0.050	<0.050	<0.60	<3.1
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	**0.058**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**5.52**	<0.050	<0.050	<3.0	**5.6**
DUP-6 (P7-3)		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4.86**	<0.050	<0.050	<3.0	**4.9**
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	**13%**	---	---	---	**13%**
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.70	<0.050	<0.050	<2.0	<2.1
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Aug-16	**0.059**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	**0.482**	<0.050	<0.050	<0.80	<0.82
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	**0.072**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<2.0	<2.8
DUP-5 (P7-3)		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	**0.078**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<2.0	<2.8
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Mar-17	**0.075**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<4.0	<4.5
P7-3		Porewater EAZ	P7-3	Hexane	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	7-Jun-17	**0.095**	<0.050	<0.050	<0.050	<0.050	**0.0064**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<4.0	<4.5
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P7-5		Porewater EAZ	P7-5	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Not Sampled																		
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.067**	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.22
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.21
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.22
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<0.30	<0.54
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.40	<0.54
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.40	<0.54
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.60	<0.70
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.40	<0.49
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.070	<0.22
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.10	<0.29
P7-5		Porewater EAZ	P7-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	4-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	**17.7**	<0.050	<0.050	<0.40	**17.8**
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.136**	<0.050	**15.8**	<0.050	<0.050	<0.30	**15.9**
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-12	**0.422**	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.542**	<0.050	**48.1**	**0.255**	<0.050	<0.90	---
P7.5-3		Porewater EAZ	P7.5-3	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	25-Feb-13	Not Sampled																		
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Mar-13	<0.40	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.529**	<0.050	**45.5**	**0.243**	<0.050	<0.050	---
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	8-May-13	**0.316**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.344**	<0.050	**42.1** J	**0.149**	<0.050	<2.0	**42.9** J
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Jun-13	<0.35	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.420**	<0.050	**29.1**	**0.178**	<0.050	<0.50	**29.7**
P7.5-3-A	@	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Jun-13	**0.484**	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.684**	<0.050	**37.0**	**0.326**	<0.050	<0.75	**38.5**
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Sep-13	<0.40	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.460**	<0.050	**27.2**	**0.246**	<0.050	<0.70	**27.9**
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-13	<0.50	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.419**	<0.050	**22.1**	**0.204**	<0.050	<0.80	**22.7**
P7.5-3		Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	<0.50	<0.10	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.539**	<0.050	**27.3**	**0.287**	<0.050	<2.0	**28.2**
P7.5-3-AG	+	Porewater EAZ	P7.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	**0.3**	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.4**	<0.1	**18**	**0.2**	<0.04	<0.2	---

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P7.5-3-MA +	Porewater EAZ	P7.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	**0.47**	<0.050	<0.050	**0.029**	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	**0.034** J	**0.68**	<0.050	**25** J	**0.40** J	**0.067** J	<0.24	**53**
P7.5-3	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	<0.50	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.587**	<0.050	**19.3**	**0.335**	**0.056**	<0.70	**20.3**
P7.5-3	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-14	**0.439**	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.469**	<0.050	**15.3**	**0.293**	<0.050	<0.60 UJ	**16.5**
P7.5-3	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	**0.318**	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.319**	<0.050	**10.9**	**0.198**	<0.050	<0.060	**11.8**
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	**0.370**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.375**	<0.050	**8.41**	**0.149**	<0.050	<1.5	**9.3**
DUP-7 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	**0.377**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.427**	<0.050	**8.44**	**0.162**	<0.050	<2.0	**9.4**
QA/QC RPD											Duplicates	2%	---	---	---	---	---	---	---	---	---	---	---	13%	---	0%	---	---	---	1%
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	**0.378**	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.480**	<0.050	**10.6**	**0.328**	<0.050	<1.0	**11.8**
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	**0.455**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.548**	<0.050	**13.2**	**0.393**	<0.050	<2.0	**14.6**
QA/QC RPD											Duplicates	18%	---	---	---	---	---	---	---	---	---	---	---	13%	---	22%	18%	---	---	21%
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	**0.522**	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.647**	<0.050	**14.7**	**0.38**	**0.055**	<3.0	**16.3**
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	**0.432**	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.520**	<0.050	**14**	**0.325**	<0.050	<3.0	**15.2**
QA/QC RPD											Duplicates	19%	---	---	---	---	---	---	---	---	---	---	---	22%	---	5%	16%	---	---	7%
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	**0.120**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.125**	<0.050	**1.67**	<0.050	<0.050	**0.64**	**2.56**
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	**0.195**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.187**	<0.050	**2.5**	**0.061**	<0.050	<2.0	**2.9**
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	40%	---	---	---	12%
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	**0.363**	**0.054**	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.437**	<0.050	**2.24**	**0.158**	<0.050	<3.0	**3.2**
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	**0.359**	**0.056**	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.418**	<0.050	**1.95**	**0.152**	<0.050	<3.0	<3.0
QA/QC RPD											Duplicates	1%	---	---	---	---	---	---	---	---	---	---	---	4%	---	14%	---	---	---	---
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	**0.262**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.312**	<0.050	**5.12**	**0.133**	<0.050	<3.0	5.8
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	**0.279**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.301**	<0.050	**5.20**	**0.141**	<0.050	<3.0	5.9
QA/QC RPD											Duplicates	6%	---	---	---	---	---	---	---	---	---	---	---	4%	---	2%	---	---	---	2%
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	**0.392**	<0.070	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.513**	<0.050	<2.0	**0.321**	<0.050	<3.0	<3.6
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	**0.382**	<0.10	<0.050	<0.050	<0.070	<0.0050	<0.050	<0.050	<0.050	<0.070	<0.0050	<0.070	**0.498**	<0.050	<2.0	**0.311**	**0.078**	<3.0	<3.6
QA/QC RPD											Duplicates	3%	---	---	---	---	---	---	---	---	---	---	---	3%	---	---	3%	---	---	---
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	**0.561**	<0.20	<0.070	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.638**	<0.050	<3.0	**0.450**	**0.081**	<5.0	<5.8
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	**0.588**	<0.20	<0.070	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.675**	<0.050	<3.0	**0.455**	**0.082**	<5.0	<5.8
QA/QC RPD											Duplicates	5%	---	---	---	---	---	---	---	---	---	---	---	6%	---	---	1%	---	---	---
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	**0.408**	<0.080	<0.090	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.073**	**0.499**	<0.050	<2.0	**0.325**	**0.177**	<4.0	<4.5
DUP-8 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	**0.429**	<0.080	<0.20	<0.050	<0.050	**0.0075**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.08**	**0.553**	<0.050	<2.0	**0.363**	**0.19**	<4.0	<4.5
QA/QC RPD											Duplicates	5%	---	---	---	---	---	---	---	---	---	---	---	10%	---	---	11%	---	---	---
P7.5-3	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	**0.351**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.456**	<0.050	<2.0	**0.191**	**0.102**	<3.0	<3.6
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	**0.369**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	**0.482**	<0.050	<2.0	**0.192**	**0.098**	<4.0	<4.5
QA/QC RPD											Duplicates	5%	---	---	---	---	---	---	---	---	---	---	---	6%	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.25	<0.050	<0.050	<0.090	<0.33
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	---
P8-3	Porewater EAZ	P8-3	---	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	25-Feb-13	Not Sampled																		
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	---
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.070	<0.36
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.050	<0.36
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
P8-3-AG +	Porewater EAZ	P8-3	BC	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	<1	<1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1	<1	<0.1	<0.04	<2	---
P8-3-MA +	Porewater EAZ	P8-3	BC	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.090	<0.37
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.20	<0.29
DUP-6 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.20	<0.32
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.30	<0.47
DUP-4 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.40	<0.54
DUP-4 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.40	<0.49
DUP-3 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.30	<0.37
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.40	<0.49
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
DUP-7 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.30	<0.36
DUP-5 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.070	<0.020	<0.050	<0.050	<0.050	<0.070	<0.0050	**0.100**	<0.050	<0.050	<0.20	**0.062**	**0.086**	<0.30	<0.42
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<0.40	<0.60
DUP-4 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<0.40	<0.67
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
DUP-5 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
DUP-1 (P8-3)	Porewater EAZ	P8-3	Hexane	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	27-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.089**	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	3-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.013**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jul-12	<0.070	<0.050	<0.050	<0.050	<0.050	**0.024**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Nov-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Dec-12	<0.090	<0.050	<0.050	<0.050	<0.090	<0.060	**0.086**	<0.050	<0.050	<0.090	<0.050	**0.106**	<0.050	<0.050	<0.050	**0.062**	**0.083**	<0.050	---
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.025**	**0.068**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	---	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	25-Feb-13	Not Sampled																		
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.122**	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.40	<0.46
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-Dec-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.22
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	DCM	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	**0.012**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-15	**0.083**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.222**	<0.050	<0.050	<0.050	**0.30**
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5S)	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											Duplicates	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0052**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5S	Porewater EAZ	P8-7.5	Hexane	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0176**	<0.050	<0.050	<0.050	<0.050	**0.0052**	**0.136**	<0.050	<0.050	<0.050	**0.153**	**0.114**	<0.050	**0.43**
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.050**	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Not Sampled																		
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I-AG +	Porewater	P8-7.5	BC	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P8-7.5I-MA +	Porewater	P8-7.5	BC	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.124**	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I-B	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.22
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.21
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.20
P8-7.5I	Porewater	P8-7.5	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	27-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	---	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	25-Feb-13	Not Sampled																		
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.129** J	<0.050	<0.050	<0.050	<0.21
P8-7.5D-A @	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 UJ	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5D)	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5D)	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5D)	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-7.5D	Porewater	P8-7.5	Hexane	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12S	Porewater EAZ	P8-12	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Sep-11	Insufficient Water for Analysis																		
P8-12S	Porewater EAZ	P8-12	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	ell Not Found																		
P8-12S	Porewater EAZ	P8-12	---	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Dec-12	d - Assumed Destroyed																		
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	27-Sep-11	Insufficient Water for Analysis																		
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	6-Oct-11	Not Sampled																		
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	3-Nov-11	Insufficient Water for Analysis																		
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	**0.010**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Oct-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Nov-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.075**	<0.050	<0.050	<0.050	<0.22
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	DCM	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Jun-14	Insufficient Water for Analysis																		
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	18-Sep-14	Insufficient Water for Analysis																		
P8-12I	Porewater EAZ	P8-12	---	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	1-Dec-14	Insufficient Water for Analysis																		
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	**0.024**	<0.050	<0.050	<0.050	<0.070	<0.050	**0.106**	<0.050	<0.050	**0.053**	**0.057**	**0.088**	<0.050	**0.33**
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12I	Porewater EAZ	P8-12	Hexane	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	**0.089**	**0.0220**	**0.075**	<0.050	<0.050	**0.124**	<0.0050	**0.474**	**0.057**	<0.050	<0.050	**0.267**	**0.388**	<0.050	**1.50**
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	27-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-12D	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]		Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]													6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]													6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source													BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]													---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D-F	F	Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.058**	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	DCM	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	9-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12D		Porewater	P8-12	Hexane	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0052**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.083**	<0.050	<0.050	<0.050	**0.082**	**0.060**	<0.050	**0.23**
P9-3		Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	6-Dec-11	<0.30	**0.076**	**0.156**	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.255**	<0.050	**11.3**	<0.080	<0.050	<2.0	**11.8**
P9-3		Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	4-Jan-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.109**	<0.050	**8.87**	<0.050	<0.050	<0.70	**8.98**
P9-3		Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	1-Feb-12	<0.20	<0.050	<0.070	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.142**	<0.050	**9.58**	<0.050	<0.050	<0.90	**9.72**
P9-3		Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	13-Mar-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.150**	<0.050	**14.6**	<0.050	<0.050	<0.80	**14.7**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Apr-12	<0.90	<0.30	<1.0	<0.30	<0.050	<0.10	<0.050	**0.093**	<0.050	<0.20	<0.050	<0.10	**1.13**	<0.050	**13.2**	<2.0	<0.60	<3.0	**14.4**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.050	**1.56**	**0.113**	**0.057**	<0.40	**1.79**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.23**	<0.050	<0.050	<0.060	**3.23**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jul-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**2.74**	<0.050	<0.050	<0.30	**2.74**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.17**	<0.050	<0.050	<0.40	**1.17**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	14-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**2.87**	<0.050	<0.050	<0.30	**2.87**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.30**	<0.050	<0.050	<0.20	**1.30**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.70	<2.1
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.95	<0.050	<0.050	<0.55	---
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.090	<2.0
P9-3R		Porewater EAZ	P9-3R	---	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	Not Sampled																		
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	<0.30	<0.30	<0.20	<0.20	<0.050	<0.20	<0.40	<0.20	<0.20	<0.050	<0.20	<0.050	<0.30	<0.20	<6.0	<0.40	<0.050	<7.0	---
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.70	<2.1
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.50	<2.1
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<1.0	<0.050	<0.050	<0.60	<2.1
P9-3R	+	Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.60	<2.1
P9-3R-AG	+	Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.1	---
P9-3R-MA	+	Porewater EAZ	P9-3	DCM	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	10-Dec-13	<0.070	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	**0.020**	<0.050	<0.050	<0.90	<0.050	**0.024**	<1.4	<1.4
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<0.050	<2.0
P9-3R-AG	+	Porewater EAZ	P9-3R	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.7**	<0.1	**0.04**	<0.2	---
P9-3R-MA	+	Porewater EAZ	P9-3R	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	<0.16 (1)	<0.050	<0.050	**0.023**	**0.022**	**0.13**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.11**	<0.050	<0.050	**0.89**	**0.089**	**0.086**	<0.24	**1.9**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**1.94**	**0.058**	<0.050	<0.70	**2.00**
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	<0.090	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.070	<0.050	<2.0	<0.20	**0.120**	<0.80	<2.2
P9-3R		Porewater EAZ	P9-3R	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	3-Dec-14	<0.050	<0.050	<0.060	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.070	<0.050	<3.0	**0.129**	**0.099**	<0.60	<3.1
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<1.5	<0.070	<0.050	<2.0	<2.5
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<1.0	<0.050	<0.050	<2.0	<2.2
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<1.0	<0.050	<0.050	<2.0	<2.2
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.70	<0.050	<0.050	<3.0	<3.1
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<3.0	<3.0
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.60	<0.050	<0.050	<3.0	<3.1
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<2.0	<2.0
DUP-6 (P9-3R)		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<2.0	<2.0
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<3.0	<3.6
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<2.0	<0.050	<0.050	<3.0	<3.6
P9-3R		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0052**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.059**	<0.050	<0.050	<0.80	**0.066**	**0.053**	<2.0	<2.2
DUP-7 (P9-3R)		Porewater EAZ	P9-3R	Hexane	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.061**	<0.070	<0.050	<0.80	**0.082**	**0.054**	<3.0	<3.1
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P9-5		Porewater EAZ	P9-5	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Not Sampled																		
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10 U	<0.050	<0.050	<0.050	<0.22
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	**1.56**	**0.064**	<0.050	**0.512**	**0.191**	**0.049**	**0.069**	<0.050	<0.050	**0.168**	<0.050	**1.23**	**1.40**	<0.050	**8.21**	**3.82**	**0.822**	<0.050	**18.1**
P9-5		Porewater EAZ	P9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.15	<0.29
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.36
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.30	<0.41
DUP-4 (P9-5)		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.20	<0.34
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.080	<0.29
DUP-8 (P9-5)		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.080	<0.29
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.22
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
DUP-6 (P9-5)		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
QA/QC RPD												**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P9-5		Porewater EAZ	P9-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0052**	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.080**	<0.050	<0.050	<0.050	**0.063**	**0.064**	<0.050	**0.21**
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.075**	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jun-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.36
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	---	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	Not Sampled																		
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10 U	<0.050	<0.050	<0.050	<0.24
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S		Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7S	Porewater EAZ	P9-7	Hexane	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	**0.050**	<0.050	<0.050	<0.20
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.22
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	---	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	Not Sampled																		
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7I	Porewater	P9-7	Hexane	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	---	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	25-Feb-13	Not Sampled																		
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9-7D	Porewater	P9-7	Hexane	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.071**	<0.050	<0.050	<0.050	<0.28
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	---	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	Not Sampled																		
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	**0.086**	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0063**	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P9.5-5	Porewater EAZ	P9.5-5	Hexane	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.055**	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.20
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	---	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Sep-12	Insufficient Water for Analysis																		
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Dec-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.10	<0.20	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	**0.087**	<0.050	<0.050	<0.43
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	DCM	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	**0.073**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3S	Porewater EAZ	P10-3	Hexane	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	---	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Oct-11	Not Sampled																		
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	**0.052**	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I-AG +	Porewater EAZ	P10-3	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
P10-3I-MA +	Porewater EAZ	P10-3	BC	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	DCM	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	**0.080**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3I	Porewater EAZ	P10-3	Hexane	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0076**	<0.050	<0.050	<0.050	**0.081**	<0.0050	**0.483**	**0.070**	<0.050	<0.050	**0.341**	**0.056**	<0.050	**1.04**
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	7-Dec-11	<0.050	<0.050	<0.090	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.050	**0.052**	**0.178**	**0.107**	<0.050	**0.40**
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.136**	<0.050	<0.050	<0.050	**0.097**	**0.078**	<0.050	**0.31**
P10-3D	Porewater	P10-3	DCM	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.07**	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P10-3D	Porewater	P10-3	Hexane	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	**0.0084**	**0.084**	<0.050	<0.050	**0.078**	<0.0050	**0.29**	<0.050	<0.050	<0.050	**0.119**	**0.07**	<0.050	**0.65**
Culvert Runoff Area																														
P14-3S	Porewater EAZ	P14-3	---	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	6-Oct-11	Insufficient Water for Analysis																		
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	---	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	14-Sep-12	Not Sampled																		
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.053**	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3S	Porewater EAZ	P14-3	DCM	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3I	Porewater EAZ	P14-3	---	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	6-Oct-11	Not Sampled																		
P14-3I	Porewater EAZ	P14-3	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3I	Porewater EAZ	P14-3	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3I	Porewater EAZ	P14-3	DCM	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3I	Porewater EAZ	P14-3	---	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Sep-12	Not Sampled																		
P14-3I	Porewater EAZ	P14-3	---	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	10-Dec-12	ell Destroyed																		
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	6-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	**0.121**	<0.050	<0.050	<0.050	<0.22
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.089**	**0.052**	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	---	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	14-Sep-12	Not Sampled																		
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	**0.065**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-3D	Porewater EAZ	P14-3	DCM	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Oct-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Nov-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.22
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	16-Dec-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12I	Porewater	P14-12	DCM	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Dec-11	**0.083**	<0.050	<0.050	<0.050	<0.050	**0.013**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Jun-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.28
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-May-13	<0.15	<0.15	<0.15	<0.15	<0.15	<0.030	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.62
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.50	<0.54
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.094**	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-12D	Porewater	P14-12	DCM	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.050**	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12I	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 UJ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14R-12D	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.075**	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Sep-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-17S	Porewater EAZ	P14-17	---	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Nov-12	ampled - tide too high																		
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.020**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	17-Sep-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	16-Dec-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
P14-17S	Porewater EAZ	P14-17	DCM	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.251**	<0.050	<0.050	<0.050	**0.25**
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	<0.070	<0.050	<0.050	<0.050	<0.050	**0.010**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.105**	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.096**	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	---	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Nov-12	ampled - tide too high																		
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.239**	<0.050	<0.050	<0.050	**0.24**
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.118**	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.039**	<0.050	**0.102**	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.050	**0.058**	<0.050	**0.062**	<0.050	**0.33**
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	**0.054** J	**0.119** J	**0.22** J	**0.179** J	**0.511** J	**0.056** J	**0.107** J	<0.070 UJ	**0.245** J	<0.050 UJ	**0.094** J	**0.052** J	**0.103** J	**0.262** J	<0.050 UJ	**2.00** J
P14-17I-AG +	Porewater	P14-17	BC	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	**0.1**	**0.4**	**0.37**	**0.5**	**0.4**	**0.1**	**0.8**	<0.1	**0.7**	<0.1	**0.2**	<0.1	**0.5**	**0.63**	<0.2	---
P14-17I-MA +	Porewater	P14-17	BC	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	**0.01**	<0.010	<0.060	<0.050	**0.25**	<0.050	<0.050	<0.050	**0.12**	<0.050	<0.050	<0.10	<0.050	**0.087**	<0.24	**0.47**
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17I	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.015**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.050	**0.092**	**0.061**	<0.050	<0.050	**0.22**
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	**0.100** J	**0.153** J	**0.207** J	**0.163** J	**0.066** J	**0.087** J	<0.050	**0.192** J	<0.050	**0.062** J	<0.050	**0.146** J	**0.163** J	<0.050	**1.34** J
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14-17D-AG +	Porewater	P14-17	BC	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	**0.06**	<0.2	---
P14-17D-MA +	Porewater	P14-17	BC	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14-17D	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	13-Sep-12	ot Sampled - Dry																		
P14.5-12S	Porewater EAZ	P14.5-12	---	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Dec-12	nsufficient Water for Analysis																		
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	**0.061**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	**0.191**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.23
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	**0.054** J	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12S	Porewater EAZ	P14.5-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	11-Sep-14	<0.050	<0.050	<0.050	**0.064**	<0.050	**0.073**	<0.050	**0.37**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.51**
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Oct-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Nov-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.29
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.36
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	23-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.36
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.041**	**0.077**	**0.083**	<0.050	**0.075**	<0.050	**0.128**	<0.050	<0.050	<0.050	<0.050	**0.105**	<0.050	**0.51**
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12I	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.060**	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P14.5-12D-AG +	Porewater	P14.5-12	BC	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	**0.08**	<0.2	---
P14.5-12D-MA +	Porewater	P14.5-12	BC	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P14.5-12D	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	---	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	Sampled - Too Silty																		
P15-12S	Porewater EAZ	P15-12	---	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12S	Porewater EAZ	P15-12	DCM	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.076**	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	---	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.051**	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12I	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	---	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010 UJ	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.076**	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P15-12D	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.013**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3S	Porewater EAZ	P17.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.071**	**0.058**	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.085**	<0.050	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.149**	<0.050	<0.050	<0.050	<0.21
P17.5-3I	Porewater	P17.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P17.5-3D-AG +	Porewater	P17.5-3	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.5 J**	**0.1**	<0.04	<0.2	---
P17.5-3D-MA +	Porewater	P17.5-3	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P17.5-3D	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.29
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.077**	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	8-Sep-14	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S-A	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	1-Dec-14	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S-B	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	4-Dec-14	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.28
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	3-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	20-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5S	Porewater EAZ	P18-4.5	Hexane	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	22-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.21
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P18-4.5I-AG +	Porewater	P18-4.5	BC	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**1**	**0.1**	**0.05**	<0.2	---
P18-4.5I-MA +	Porewater	P18-4.5	BC	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5I	Porewater	P18-4.5	DCM	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
P18-4.5D-AG +	Porewater	P18-4.5	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**1.8**	**0.1**	<0.04	<0.2	---
P18-4.5D-MA +	Porewater	P18-4.5	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18-4.5D	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3S	Porewater EAZ	P18.5-3	DCM	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3I	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.054**	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P18.5-3D	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Reference Area																														
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.016**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.025**	<0.050	**0.062**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.083**	<0.050	**0.139**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.181**	<0.050	**0.40**
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S	Porewater EAZ	PR2-8	---	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.148**	<0.050	**0.172**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.149**	<0.050	**0.47**
PR2-8S	Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	**0.030**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.070**	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]		Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]													6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]													6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source													BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]													---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	**0.058**	**0.119**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.067**	<0.050	**0.31**
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	23-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	19-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.021**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.055**	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.073**	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	**0.049**	<0.050	**0.110**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8S		Porewater EAZ	PR2-8	DCM	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	**0.099**	<0.050	**0.112**	<0.050	<0.060	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.21**
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	2-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	6-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	---	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Nov-12	<0.080	<0.050	<0.050	<0.050	<0.050	**0.023**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.081**	<0.050	<0.050	<0.050	<0.22
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I	+	Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I-AG	+	Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.1	---
PR2-8I-MA	+	Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	17-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8I-AG	+	Porewater	PR2-8	BC	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
PR2-8I-MA	+	Porewater	PR2-8	BC	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.195**	**0.088**	<0.050	<0.050	**0.28**
PR2-8I		Porewater	PR2-8	DCM	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	2-Feb-12	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.28
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.030	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.22
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.060	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	---	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D-F	F	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D U	&	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D-AG	+	Porewater	PR2-8	BC	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
PR2-8D-MA	+	Porewater	PR2-8	BC	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8D		Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	---	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	Not Sampled																		
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5S		Porewater EAZ	PEC-5	DCM	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	---	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Sep-12	Not Sampled																		
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5I		Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	---	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Sep-12	Not Sampled																		
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D-AG	+	Porewater	PEC-5	BC	NA	RL	4.6-5.0	4.6	5	Colluvium	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
PEC-5D-MA	+	Porewater	PEC-5	BC	NA	RL	4.6-5.0	4.6	5	Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-5D		Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Seawater																															
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.050	---
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	24-Jun-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O		Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID[3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ)[1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater)[1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02[5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG[2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-O	Surface Water	P3-3	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-3-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-0	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3-NBO	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-3-NBO	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO +	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO-AG +	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.01 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.02 UJ	<0.1 UJ	---
P3-3-NBO-MA +	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P3-3-NBO	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO-AG +	Surface Water	P3-3	BC	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
P3-3-NBO-MA +	Surface Water	P3-3	BC	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P3-3-NBO	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	DCM	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-3-NBO	Surface Water	P3-3	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-4-O	Surface Water	P3-4	DCM	NA	WB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-4-NBO	Surface Water	P3-4	DCM	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.85	---
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	24-Jun-13	<0.090	<0.050	<0.050	<0.050	<0.050	**0.014**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.179**	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P3-12-O)	Surface water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.053**	<0.050	<0.050	<0.050	<0.21
DUP-1 (P3-12-O)	Surface water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-3 (P3-12-O)	Surface water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-3 (P3-12-O)	Surface water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O	Surface Water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-8 (P3-12-O)	Surface water	P3-12	Hexane	NA	WB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.062**	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	10-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P3-12-NBO)	Surface water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P3-12-NBO	Surface Water	P3-12	Hexane	NA	WB	NBO	NBO	NBO	---	---	8-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	---	NA	EB	SW	SW	SW	---	---	10-Dec-12	Not Sampled																		
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.078**	<0.050	<0.050	<0.050	<0.21
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-O	Surface Water	P6-3	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-NBO	Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO	Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P6-3-NBO	Surface Water	P6-3	---	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	Not Sampled																		

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]		Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]													6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]													6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source													BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]													---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.055**	<0.050	**0.053**	**0.349**	<0.050	<0.050	**0.46**
P6-3-NBO		Surface Water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-3-NBO		Surface Water	P6-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-8-O		Surface Water	P6-8	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8-NBO		Surface Water	P6-8	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.079**	<0.050	<0.050	<0.050	<0.21
P6-8-NBO		Surface Water	P6-8	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.764**	<0.050	<0.050	<0.050	---
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O	+	Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O-AG	+	Surface Water	P6-13	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.01 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.02 UJ	<0.1 UJ	---
P6-12-O-MA	+	Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O-AG	+	Surface Water	P6-12	BC	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
P6-12-O-MA	+	Surface Water	P6-12	BC	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.127**	<0.050	<0.050	<0.050	<0.21
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-O		Surface Water	P6-12	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.050**	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P6-12-NBO		Surface Water	P6-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.318**	<0.050	<0.050	<0.050	**0.32**
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	---	NA	EB	SW	SW	SW	---	---	10-Dec-12	Not Sampled																		
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-O		Surface Water	P8-3	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.090**	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-3-NBO		Surface Water	P8-3	---	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	Not Sampled																		
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-3-NBO		Surface Water	P8-3	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-8-O		Surface Water	P8-8	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-8-NBO		Surface Water	P8-8	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-8-NBO		Surface Water	P8-8	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O		Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O		Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O		Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene [6]	Acenaphthylene [6]	Acridine [6]	Anthracene [6]	Benz(a)anthracene [6]	Benzo(a)pyrene	Benzo(b)fluoranthene [6]	Benzo(g,h,i)perylene [6]	Benzo(k)fluoranthene [6]	Chrysene [6]	Dibenz(a,h)anthracene [6]	Fluoranthene [6]	Fluorene [6]	Indeno(1,2,3-c,d)pyrene [6]	Naphthalene	Phenanthrene [6]	Pyrene [6]	Quinoline [6]	Total PAHs [6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT [4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	10-Dec-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	11-Mar-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	24-Jun-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.076**	<0.050	<0.050	<0.050	<0.22
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	**1.75** J	**0.070** J	<0.050	**0.588** J	**0.185** J	**0.049** J	**0.071** J	<0.050	<0.050	**0.172** J	<0.050	**1.37** J	**1.59** J	<0.050	**7.14** J	**4.32** J	**0.891** J	<0.050	**18.2** J
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-12-O)	Surface water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P8-12-O)	Surface water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
DUP-7 (P8-12-O)	Surface water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-O	Surface Water	P8-12	Hexane	NA	EB	SW	SW	SW	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.142**	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-12-NBO)	Surface water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
QA/QC RPD											**Duplicates**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P8-12-NBO	Surface Water	P8-12	Hexane	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
P14C-SW	Surface Run-off	P14C	DCM	NA	CL	SW	SW	SW	---	---	18-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PEC-SW	Surface Run-off	PEC	DCM	NA	RL	SW	SW	SW	---	---	18-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O +	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O-AG +	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.01 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.02 UJ	<0.1 UJ	---
PR2-3-O-MA +	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	9-Dec-13	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050 c	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.50	<0.50
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O-AG +	Surface Water	PR2-3	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
PR2-3-O-MA +	Surface Water	PR2-3	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	<0.24
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-O	Surface Water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-3-NBO	Surface Water	PR2-3	---	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	shipped to laboratory.																		
PR2-3-NBO	Surface Water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	**0.438**	<0.050	<0.050	**0.152**	<0.050	**0.013**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.332**	**0.359**	<0.050	**1.96**	**1.08**	**0.208**	<0.050	**4.54**
PR2-8-O	Surface Water	PR2-8	DCM	NA	RL	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-8-NBO	Surface Water	PR2-8	DCM	NA	RL	NBO	NBO	NBO	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-12	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	24-Jun-13	<0.15	<0.050	<0.050	**0.089**	**0.153**	**0.071**	**0.066**	<0.050	**0.050**	**0.686**	<0.050	**1.96**	**0.186**	<0.050	<0.050	**1.21**	**1.76**	<0.050	**6.23**
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-O	Surface Water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.057**	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	<0.040	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.23
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
PR2-12-NBO	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RAC-SW	Surface Run-off	RAC	DCM	NA	RL	SW	SW	SW	---	---	18-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
Tidal Cycle Sampling																														
P5-3D-A	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	<0.050	<0.21
P5-3D-B	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
P5-3D-C	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D-D	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P5-3D-E	Porewater	P5-3	DCM	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8S-A	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8S-B	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.060	<0.28
P6-8S-C	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	<0.20	<0.050	<0.050	<0.050	<0.050	**0.018**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.056**	<0.050	<0.050	<0.20	<0.10	<0.050	<0.10	<0.36
P6-8S-D	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.050	<0.050	<0.10	<0.43
P6-8S-E	Porewater EAZ	P6-8	DCM	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.050	<0.28
P6-8D-A	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D-B	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D-C	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.23
P6-8D-D	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P6-8D-E	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
P7-3-A	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.19**	<0.050	<0.050	<0.30	**3.19**
P7-3-B	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.39**	<0.050	<0.050	<0.30	**3.39**
P7-3-C	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4.68**	<0.050	<0.050	<0.40	**4.68**
P7-3-D	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**5.08**	<0.050	<0.050	<0.40	**5.08**
P7-3-E	Porewater EAZ	P7-3	DCM	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**3.33**	<0.050	<0.050	<0.30	**3.33**
Field Duplicate/Equipment Blank/Travel Blank																														
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	<0.060	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-1 (P14C-SW)	Surface Run-off	P14C	DCM	NA	CL	SW	SW	SW	---	---	18-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8I)	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P3-3-O)	Surface Water	P3-3	DCM	NA	WB	SW	SW	SW	---	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P18-4.5D)	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P7.5-3)	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	8-May-13	<0.30	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.323**	<0.050	**55.2** J	**0.143**	<0.050	<0.80	**55.6** J
DUP-1 (P14.5-12I)	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	23-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.30	<0.36
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050 UJ	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8D-C)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.096** J	<0.050	<0.050	<0.050	<0.21
DUP-1 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P6-8I)	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-1 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8I)	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (PEC-5D)	Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P3.8-3D)	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.095** J	<0.050	<0.050	<0.21
DUP-2 (P3.5-12D)	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D-E)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	<0.50	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.49**	<0.050	**28.2**	**0.251**	<0.050	<2.0	**29**
DUP-2 (P7.5-3)-AG +	Porewater EAZ	P7.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	**0.3**	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.4**	<0.1	**18**	**0.2**	<0.04	<0.2	---
DUP-2 (P7.5-3)-MA +	Porewater EAZ	P7.5-3	BC	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	**0.41**	<0.050	<0.050	**0.034**	<0.010	<0.0090	<0.050	---	<0.050	<0.050	<0.050	<0.020 UJ	**0.6**	<0.050	**20** J	**0.29** J	**0.038** J	<0.24	---
DUP-2 (PEC-5D)	Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-2 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-3 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-3 (P8-3)	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.15	<0.050	<0.050	<0.050	<0.25
DUP-3 (P4.2-3D)	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (PR2-3-NBO)	Surface water	PR2-3	DCM	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P18.5-3D)	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P3-7D)	Porewater	P3-7	DCM	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	<0.10	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
DUP-4 (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P9-7I)	Porewater	P9-7	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P3-12-NBO)	Surface Water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-4 (P18-4.5S)	Porewater EAZ	P18-4.5	DCM	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13	<0.20	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.090	<0.050	<0.050	<0.050	<0.29
DUP-4 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P8-12-O)	Surface water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P8-7.5I)	Porewater	P8-7.5	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-4 (P8-3)	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20	<0.050	<0.050	<0.080	<0.29
DUP-5 (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (PR2-12-NBO)	Surface Water	PR2-12	DCM	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P14.5-12I)	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P6.5-3)	Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	**0.366**	<0.080	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.509**	<0.050	**29.8**	**0.204**	<0.050	<0.55	**30.9**
DUP-5 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5	Colluvium	Till	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P3-12-NBO)	Surface water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (PR2-3-O)	Surface water	PR2-3	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (PR2-3-O)-AG +	Surface water	PR2-3	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.2	---
DUP-5 (PR2-3-O)-MA +	Surface water	PR2-3	BC	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	---
DUP-5 (P3-12-O)	Surface water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P8-3)	Porewater EAZ	P8-3	DCM	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	**0.294**	<0.060	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.299**	<0.050	**9.88**	**0.175**	<0.050	<0.050	**10.6**
DUP-6 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.050	<0.050	<0.21
DUP-6 (P14.5-12D)	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (P4.9-5)	Porewater EAZ	P4.9-5	DCM	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	<0.10	<0.050	<0.050	<0.050	<0.050	**0.019**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.206** J	<0.050	<0.050	**0.053**	**0.119** J	**0.107** J	<0.050	**0.50** J
DUP-6 (P14-17D)	Porewater	P14-17	DCM	NA	CL	4.6-5.0	4.6	5	Colluvium	---	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050 UJ	<0.040 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050	<0.050 UJ	<0.050	<0.050 UJ	<0.050	<0.050 UJ	<0.050 UJ	<0.050	<0.21 UJ
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	**0.189**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.294**	<0.050	**8.66**	<0.20 U	<0.050	<0.60	**9.14**
DUP-6 (PR2-12-O)	Surface water	PR2-12	DCM	NA	RL	SW	SW	SW	---	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-14	**0.433**	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.485**	<0.050	**17.7**	**0.299**	<0.050	<0.050 UJ	**18.9**
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	<0.20	<0.20	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.151**	<0.050	<3.0	**0.116**	<0.050	<0.30	<3.0

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
DUP-7 (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.079** J	<0.050	<0.050	<0.050	<0.050	**0.061**	<0.050	<0.21
DUP-7 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P14.5-12D)	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P14.5-12I)	Porewater	P14.5-12	DCM	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P15-12I)	Porewater	P15-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P18-4.5D)	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P3.8-3D)	Porewater	P3.8-3	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
DUP-7 (P4.2-3D)	Porewater	P4.2-3	DCM	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	**0.125** J	<0.050 UJ	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.119**	<0.050	**10.6**	**0.081**	<0.050	<0.40	**10.9**
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	DCM	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	<0.070	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.063**	<0.050	**2.57**	<0.050	<0.050	<0.20	**2.63**
DUP-8 (P14-17I)	Porewater	P14-17	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	<0.060	<0.050	<0.050	<0.050	<0.050	**0.010**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.118**	<0.050	<0.050	<0.050	<0.21
DUP-8 (PEC-5I)	Porewater	PEC-5	DCM	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P15-12D)	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	**0.014** J	<0.050	**0.050**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.072**	<0.050	<0.050	<0.050	<0.21
DUP-8 (P18.5-3D)	Porewater	P18.5-3	DCM	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-8 (P6.5-3)	Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	**0.326** J	<0.070 UJ	<0.050 UJ	<0.050 UJ	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.401** J	<0.050	**3.34**	**0.167** J	<0.050	<0.050 UJ	**4.23**
DUP-9 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (P14R-12I)	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (P3.8-3S)	Porewater EAZ	P3.8-3	DCM	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (PEC-5D)	Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (P3.5-12D)	Porewater	P3.5-12	DCM	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-9 (P3.5-12D)-AG +	Porewater	P3.5-12	BC	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.04	<0.2	---
DUP-9 (P3.5-12D)-MA +	Porewater	P3.5-12	BC	CS	WB	4.6-5.0	4.6	5.0	---	---	11-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	---
DUP-9 (P8-3)	Porewater EAZ	P8-3	DCM	NA	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.40	<0.050	<0.050	<0.10	<0.46
DUP-9 (P5.25-3)	Porewater EAZ	P5.25-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	**0.427**	<0.10 UJ	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.562**	<0.050	**27.5**	**0.419**	**0.111**	<0.050	**29.1**
DUP-10 (P18-4.5D)	Porewater	P18-4.5	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-10 (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-10 (P18.5-3D)	Porewater	P18.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-10 (P17.5-3D)	Porewater	P17.5-3	DCM	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
DUP-10 (P17.5-3D)-AG +	Porewater	P17.5-3	BC	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**1.1** J	**0.1**	**0.04**	<0.2	---
DUP-10 (P17.5-3D)-MA +	Porewater	P17.5-3	BC	NA	FS	4.6-5.0	4.6	5.0	---	---	12-Mar-14	<0.050	<0.050	<0.050	<0.010	<0.010	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.050	<0.050	<0.10	<0.050	<0.020	<0.24	---
DUP-10 (P7.5-3)	Porewater EAZ	P7.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	<0.50	<0.090	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.577**	<0.050	**21.5**	**0.369**	**0.059**	<0.70	**22.5**
DUP-10 (P8-12-O)	Surface water	P8-12	DCM	NA	EB	SW	SW	SW	---	---	12-Sep-14	<0.050 UJ	<0.050 UJ	<0.050	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050	<0.050	<0.050 UJ	<0.050	<0.050 UJ	<0.050 UJ	<0.050	**0.051** J	<0.050 UJ	<0.050 UJ	<0.050	<0.21 UJ
DUP-11 (P6-3-NBO)	Surface water	P6-3	DCM	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	<0.080	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.050	<0.22
DUP-11 (P8-12-NBO)	Surface water	P8-12	DCM	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-11 (P14.5-12D)	Porewater	P14.5-12	DCM	NA	CL	4.6-5.0	4.6	5	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-11 (P15-12D)	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
DUP-11 (P6.5-3)	Porewater EAZ	P6.5-3	DCM	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	<0.40	<0.070	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.455**	<0.050	**19.1**	**0.175**	<0.050	<0.80	**19.8**
DUP-11 (P3-12-O)	Surface water	P3-12	DCM	NA	WB	SW	SW	SW	---	---	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.052**	<0.050	<0.050	<0.050	<0.21
DUP-12 (P3-12-NBO)	Surface water	P3-12	DCM	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	<0.090	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.22
DUP-12 (P15-12D)	Porewater	P15-12	DCM	NA	CL	4.6-5.0	4.6	5	Weathered Colluvium	---	16-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-12 (PEC-5D)	Porewater	PEC-5	DCM	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-A (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.101**	<0.050	<0.050	<0.050	<0.21
DUP-A (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-B (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-B (P14R-12I)	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-C (P3R-7I)	Porewater	P3R-7	DCM	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.059**	<0.050	<0.050	**0.099**	**0.067**	<0.050	<0.050	**0.22**
DUP-C (P14R-12D)	Porewater	P14R-12	DCM	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-D (PR2-8D)	Porewater	PR2-8	DCM	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-D (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-E (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
DUP-E (P6-8I)	Porewater	P6-8	DCM	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.435**	<0.050	<0.050	<0.050	**0.43**
DUP-F (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-F (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-G (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-G (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-H (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-H (P14R-12I)	Porewater	P14R-12	DCM	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-H (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-I (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-I (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.070	<0.050	<0.050	<0.050	<0.21
DUP-J (P3.5-7D)	Porewater	P3.5-7	DCM	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-J (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-K (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-K (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-L (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-L (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**2.81**	**0.061**	<0.050	<0.050	**2.87**
DUP-M (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-M (P3R-7D)	Porewater	P3R-7	DCM	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050	<0.050	<0.22
DUP-N (P8-7.5D)	Porewater	P8-7.5	DCM	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-N (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
DUP-O (P6-8D)	Porewater	P6-8	DCM	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.080**	<0.050	<0.050	<0.050	<0.21
DUP-P (P9-7D)	Porewater	P9-7	DCM	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	4-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	8-May-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANK 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	6-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANK 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
EQUIPMENT BLANKS	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jun-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	19-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	20-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	10-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
RINSEATE 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	10-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	10-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	15-Jun-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE -1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	8-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	7-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RB-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	29-Feb-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.058**	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	16-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	16-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	21-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jan-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	16-Feb-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSATE-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	5-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	**0.055**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
E-BLANK-1	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSEATE 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
RINSEATE 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	18-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jun-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	<0.020	<0.010	<0.050	<0.083
RINSATE-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	10-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	8-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RB-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	1-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	17-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
R-BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	17-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20

TABLE A-2
CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING REPORT

Sample ID [3]	Matrix	Sample Location	Method	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Acenaphthene[6]	Acenaphthylene[6]	Acridine[6]	Anthracene[6]	Benz(a)anthracene[6]	Benzo(a)pyrene	Benzo(b)fluoranthene[6]	Benzo(g,h,i)perylene[6]	Benzo(k)fluoranthene[6]	Chrysene[6]	Dibenz(a,h)anthracene[6]	Fluoranthene[6]	Fluorene[6]	Indeno(1,2,3-c,d)pyrene[6]	Naphthalene	Phenanthrene[6]	Pyrene[6]	Quinoline[6]	Total PAHs[6]
Updated Screening Level (Porewater and Porewater EAZ) [1]												6	46	3	4	0.1	0.01	0.48	0.17	0.48	0.1	0.26	4	12	0.21	1	0.3	4	3.4	NA
Updated Screening Level (Surfacewater) [1]												6	46	0.05	0.1	0.1	0.01	0.48	0.17	0.48	0.1	0.26	0.2	12	0.21	1	0.3	0.02 [5]	3.4	NA
Source												BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	CSR/10	BC AWQC	FIGQG (FW)	FIGQG (FW)	FIGQG (FW)	BC AWQG	FIGQG (FW)	BC AWQG	BC AWQG	FIGQG (FW)	BC AWQG	CSR/10	BC AWQG [2]	CSR/10	NS
RBMT[4]												---	---	---	---	---	0.28	---	---	---	---	---	---	---	---	44	---	---	---	---
R-BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	22-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	14-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSATE BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	6-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSEATE 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Mar-14	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.010 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.050 UJ	<0.21 UJ
RINSATE-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-Jun-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	<0.010	<0.020	<0.010	<0.050	<0.083
RINSATE-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	11-Sep-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	9-Dec-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RB-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	2-Mar-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	18-May-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
R-BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	19-Aug-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	---
R-BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	24-Nov-16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
R-BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	15-Mar-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSATE BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	7-Jun-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20
RINSEATE 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE 5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	15-Mar-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE-6	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	17-Dec-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.080**	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE 6	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	14-Mar-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	24-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	5-Jul-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	3-Aug-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	6-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.158**	**0.062**	<0.050	<0.050	<0.050	**0.22**
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	7-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.210
RINSATE BLANK-1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	8-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	1-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	17-Sep-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.053**	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Oct-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	7-Nov-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	8-Jan-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	**0.107**	<0.050	<0.050	<0.050	**0.110**	**0.078**	<0.050	**0.29**
RINSEATE BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	10-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.210
RINSATE BLANK-2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	9-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-2	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	2-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-2	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	13-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	14-Sep-12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.210
RINSATE BLANK-3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-3	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	3-Dec-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK-3	NA	NA	Hexane	NA	NA	NA	NA	NA	NA	NA	11-Mar-15	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	14-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.065**	<0.050	<0.050	<0.210
RINSATE BLANK-4	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	11-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSEATE BLANK 5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	18-Jun-13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.066**	<0.050	<0.050	<0.21
RINSATE BLANK 5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.210
RINSATE BLANK-5	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
RINSATE BLANK 6	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	13-Jun-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.058**	<0.050	<0.050	<0.050	<0.210
RINSATE BLANK 6	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	12-Sep-14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.21
T-BLANK-1	NA	NA	DCM	NA	NA	NA	NA	NA	NA	NA	18-Apr-17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.20

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.
1 - The rational supporting the Updated Screening Levels (USLs) for porewater and surface water is provided by SLR Consulting Canada Ltd. in their memorandum entitled Updated Screening Levels for Foreshore Monitoring including an Addendum, dated May 9 and June 6, 2013, respectively. A general hierarchy was developed for defining USLs as follows: First) BC Water Quality Guidelines (approved then working); Second) 1/10 CSR aquatic life marine standards (for porewater); and lastly, reference area concentration (which commonly defaults to the laboratory detection limit)
2 - This is a derived value and not a BCAWQG. See Memorandum "Updated Screening Levels For Foreshore Monitoring", April 25, 2013 for how the value was derived.
3 - Sample IDs do not exactly match laboratory reports. They have been cleaned up for easy comparison of same location over time.
4 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.
5 - The laboratory detection limit for pyrene (0.05 µg/L) exceeds the surface water USL for pyrene of 0.02 µg/L
6 - The Ministry of Environment and Climate Change Strategy (ENV) requires the co-reporting of PAHs when LEPH and HEPH calculations are required, consequently, LEPH and HEPH must be co-reported with the corresponding PAH results. Although these PAHs are not considered site specific potential contaminants of concern (PCOCs), they were analyzed to calculate LEPH and/or HEPH and were either not detected or detected below Updated Screening Levels (USLs). For the purpose of this monitoring report, these PAHs have not been tabulated; however, as it is an ENV requirement, the data has been included in the ALS laboratory reports provided in Appendix E.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than Updated Screening Level
SHADE	Sample concentration greater than Updated Screening Level and/or RBMT

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - Aquagate
ATB - well located in anchor trench barrier
BC - British Columbia Ministry of Environment Reference Method
BC AWQG - British Columbia Approved Water Quality Guidelines. Marine unless otherwise noted as FW (freshwater).
C - Compliance well (Post-construction)
CS - well located cross slope
CSR/10 - Contaminated Sites Regulation (including up to Stage 11 amendments, November 2017) divided by ten (10)
DS - well located down slope
EAZ - ecologically active zone
EB - eastern barrier
E FPTS - Eastern Foreshore Passive Treatment System
FIGQG -Federal Interim Groundwater Quality Guidelines
IBA - In between area
NA - not applicable
NBO - near bottom samples
NS - no standard established for indicated parameter
OB - well located within the original barrier
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
PAH - polycyclic aromatic hydrocarbons
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
U - Up gradient well (Post-construction)
USAT - well located up slope of anchor trench
WB - western barrier
W FPTS - Western Foreshore Passive Treatment System

APPENDIX A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
2020 AND 2021 MONITORING REPORT

														Copper	Zinc
Upper Cap Concentrations[1]														200	1,000
RBMT[2]														6.2	90
T-BLANK-6	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112693	T	<0.5	<3.
TRAVEL BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	T	<0.50	<3.0
TRAVEL BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	T	<0.50	<3.0

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
CCME - Canadian Council of Ministers of the Environment (Updates to May 2008). Marine unless otherwise noted as FW (freshwater).
CRC ICPMS - Collision/Reaction Cells Inductively Coupled Plasma Mass Spectrometry
CSR/10 - Contaminated Sites Regulation (including up to Stage 11 amendments, November 2017) divided by ten (10)
D - dissolved metals
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
HR ICPMS - High Resolution Inductively Coupled Plasma Mass Spectrometry
NBO - near bottom samples
NS - no standard established for indicated parameter.
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
T - total metals
U - Up gradient well (Post-construction)
W FPTS - Western Foreshore Passive Treatment System

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
Post-Construction FTPS														
P3-6-NBO @	Surface Water	PW17-06	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**23.7**	<20.
P3-6-NBO	Surface Water	PW17-06	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<10.	<60.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.68**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**1.91**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	**0.62**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.83**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	**0.88**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**1.56**	<3.
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	<0.50	<3.0
P3-6-NBO	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	<0.50	<3.0
P3-6-O @	Surface Water	PW17-06	CRC ICPMS	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**10.8**	<20.
P3-6-O	Surface Water	PW17-06	CRC ICPMS	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**1.18**	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**1.28**	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.72**	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	**0.7**	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	<0.5	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	**0.66**	<3.
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	<0.50	<3.0
P3-6-O	Surface Water	PW17-06	HR ICPMS	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**1.35**	<3.0
P3-12-NBO @	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**29.5**	<20.
DUP1 (P3-12-NBO) @	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**7.8**	<20.
QA/QC RPD										11-Dec-17			116.4%	---
P3-12-NBO	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<10.	<60.
DUP1 (P3-12-NBO)	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<10.	<60.
QA/QC RPD										11-Dec-17			---	---
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.83**	**3.2**
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**1.04**	**3.1**
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	**0.55**	<3.
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.75**	<3.
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	13-Sep-18	L2163427	D	**0.53**	<3.
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	13-Sep-18	L2163427	T	**0.74**	<3.
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	**0.53**	<3.0
DUP-2 (P3-12-NBO)	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	**0.52**	**4.1**

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
QA/QC RPD										3-Dec-18			---	---
P3-12-NBO	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.92**	**3.3**
DUP-2 (P3-12-NBO)	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.51**	**5.3**
QA/QC RPD										3-Dec-18			---	---
P3-12-O @	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**13.5**	<20.
P3-12-O	Surface Water	PW17-08	CRC ICPMS	NA	W FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**0.77**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**1.54**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.56**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	**0.77**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	**0.61**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	**0.67**	<3.
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	**0.59**	<3.0
P3-12-O	Surface Water	PW17-08	HR ICPMS	NA	W FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**0.85**	<3.0
P6-6-NBO @	Surface Water	PW17-18	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**20.8**	<20.
P6-6-NBO	Surface Water	PW17-18	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<10.	<60.
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.6**	**3.8**
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**1.32**	**4.6**
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	**0.6**	**3.8**
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.68**	**0.7**
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	<0.5	<3.
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**0.63**	<3.
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	<0.50	<3.0
P6-6-NBO	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.59**	<3.0
P6-6-O @	Surface Water	PW17-18	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**28.1**	<20.
P6-6-O	Surface Water	PW17-18	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**1.1**	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**1.2**	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.65**	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	<0.5	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	<0.5	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	**0.92**	<3.
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	<0.50	<3.0
P6-6-O	Surface Water	PW17-18	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**0.59**	<3.0

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
P6-12-NBO @	Surface Water	PW17-20	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**23.1**	<20.
P6-12-NBO	Surface Water	PW17-20	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<10.	<60.
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.51**	<3.
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**1.26**	**3.5**
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	<0.5	<3.
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**0.71**	<3.
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	**0.58**	**8.6**
P6-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.81**	**7.1**
P6-12-O @	Surface Water	PW17-20	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**23.9**	<20.
P6-12-O	Surface Water	PW17-20	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**0.8**	<3.
DUP5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.66**	<3.
QA/QC RPD										20-Mar-18			---	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**1.12**	<3.
DUP5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**1.11**	<3.
QA/QC RPD										20-Mar-18			0.0	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.51**	<3.
DUP-5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	<0.5	<3.
QA/QC RPD										14-Jun-18			---	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	**1.78**	<3.
DUP5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.66**	<3.
QA/QC RPD										14-Jun-18			---	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	**0.63**	<3.
DUP-5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	**0.55**	<3.
QA/QC RPD										14-Jun-18			---	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	<0.50	<3.
DUP-5 (P6-12-O)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**0.66**	<3.
QA/QC RPD										14-Jun-18			---	---
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	<0.50	<3.0
P6-12-O	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**0.55**	<3.0
P8-6-NBO @	Surface Water	PW17-28	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**22.2**	<20.
P8-6-NBO	Surface Water	PW17-28	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	**11.**	<60.
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.69**	<3.
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**0.63**	<3.0

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	**1.03**	<3.0
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.7**	<3.0
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	**0.5**	<3.0
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**0.7**	<3.0
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	<0.50	<3.0
P8-6-NBO	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	<0.50	<3.0
P8-6-O @	Surface Water	PW17-28	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**22.5**	<20.
P8-6-O	Surface Water	PW17-28	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**1.22**	**7.4**
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**1.04**	**10.1**
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.73**	<3.0
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	**0.7**	<3.0
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	**0.51**	<3.0
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	**0.79**	**4.7**
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	**0.55**	<3.0
P8-6-O	Surface Water	PW17-28	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**0.61**	<3.0
P8-12-NBO @	Surface Water	PW17-30	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	D	**19.3**	<20.
P8-12-NBO	Surface Water	PW17-30	CRC ICPMS	NA	E FPTS	NBO	NBO	NBO	---	11-Dec-17	L2033765	T	<0.3	<60.
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	**0.59**	<3.
DUP10 (P8-12-NBO)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	D	<0.5	<3.
QA/QC RPD										20-Mar-18			---	---
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**0.84**	<3.
DUP10 (P8-12-NBO)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	20-Mar-18	L2070135	T	**0.86**	<3.
QA/QC RPD										20-Mar-18			---	---
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	D	**0.56**	<3.
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	14-Jun-18	L2112693	T	**0.92**	<3.
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	D	<0.5	<3.
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	12-Sep-18	L2163427	T	**0.68**	<3.
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.58**	<3.0
DUP-1 (P8-12-NBO)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	T	**0.65**	**4.2**
QA/QC RPD										3-Dec-18			---	---
P8-12-NBO	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	<0.50	<3.0
DUP-1 (P8-12-NBO)	Surface Water	PW17-20	HR ICPMS	NA	E FPTS	NBO	NBO	NBO	---	3-Dec-18	L2205030	D	**0.52**	<3.0
QA/QC RPD										3-Dec-18			---	---

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
P8-12-O @	Surface Water	PW17-30	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	D	**19.**	<20.
P8-12-O	Surface Water	PW17-30	CRC ICPMS	NA	E FPTS	SW	SW	SW	---	11-Dec-17	L2033765	T	<10.	<60.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	D	**0.76**	**4.1**
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	20-Mar-18	L2070135	T	**0.83**	<3.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	D	**0.52**	<3.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	14-Jun-18	L2112693	T	**0.81**	<3.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	D	<0.5	<3.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	12-Sep-18	L2163427	T	**0.62**	<3.
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	D	**0.77**	**4.1**
P8-12-O	Surface Water	PW17-30	HR ICPMS	NA	E FPTS	SW	SW	SW	---	3-Dec-18	L2205030	T	**0.52**	<3.0
CBP-1	Porewater	CBP-1	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-1	Porewater	CBP-1	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	D	**1.01**	**1.6**
CBP-1	Porewater	CBP-1	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.50	<3.0
CBP-2	Porewater	CBP-2	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-2	Porewater	CBP-2	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	D	**0.22**	**1.6**
CBP-2	Porewater	CBP-2	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	4-Dec-18	L2205928	D	<0.50	<3.0
CBP-5	Porewater	CBP-5	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-5	Porewater	CBP-5	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Sep-18	L2164036	D	<0.2	<1.
CBP-5	Porewater	CBP-5	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.50	<3.0
CBP-6	Porewater	CBP-6	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-6	Porewater	CBP-6	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Sep-18	L2164036	D	<0.2	**1.1**
CBP-6	Porewater	CBP-6	HR ICPMS	CBP	W FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	D	<0.50	<3.0
CBP-7	Porewater	CBP-7	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	<3.
DUP-1(CBP-7)	Porewater	CBP-7	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	<3.
QA/QC RPD										13-Jun-18			---	---
CBP-7	Porewater	CBP-7	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	D	<0.5	**4.4**
CBP-7	Porewater	CBP-7	HR ICPMS	CBP	W FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.20	**1.3**
CBP-8	Porewater	CBP-8	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-8	Porewater	CBP-8	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	D	<0.5	<3.
CBP-8	Porewater	CBP-8	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	D	<0.20	<1.0

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
CBP-15	Porewater	CBP-15	HR ICPMS	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-15	Porewater	CBP-15	HR ICPMS	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	12-Sep-18	L2163271	D	<0.5	**3.2**
CBP-15	Porewater	CBP-15	HR ICPMS	CBP	E FPTS	0.9-1.0	0.9	1.0	Imported sand and AG/OC	6-Dec-18	L2207439	D	**0.22**	<1.0
CBP-16	Porewater	CBP-16	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	<3.
CBP-16	Porewater	CBP-16	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	D	<0.5	<3.
CBP-16	Porewater	CBP-16	HR ICPMS	CBP	E FPTS	1.1-1.2	1.1	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	D	<0.40	<2.0
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	**2.8**	<10.
DUP1 (PW17-01)	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	<10.	<50.
QA/QC RPD										14-Nov-17			---	---
PW17-01 @	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	D	**38.9**	**12.**
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	16-Jan-18	L2045816	D	<4.	<20.
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	D	**2.3**	<10.
DUP6 (PW17-01)	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	**0.64**	**5.4**
PW17-01	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	**0.81**	**5.6**
QA/QC RPD										21-Mar-18			---	3.6%
PW17-01	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	D	<0.5	**3.6**
PW17-01	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Jun-18	L2111824	D	**0.55**	<3.
PW17-01	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	D	**0.54**	**4.7**
PW17-01	Porewater	PW17-01	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	D	**0.68**	<3.0
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	D	**0.63**	**2.7**
PW17-01	Porewater	PW17-01	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	D	**0.36**	**2.**
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	**2.4**	<10.
PW17-02 @	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**38.**	<10.
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-02	Porewater	PW17-02	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**0.79**	<3.
PW17-02	Porewater	PW17-02	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	**0.69**	<3.
PW17-02	Porewater	PW17-02	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Jun-18	L2111824	D	<0.5	**3.2**
PW17-02	Porewater	PW17-02	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	D	**0.73**	<3.
PW17-02	Porewater	PW17-02	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	D	**0.69**	<3.0
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	D	**0.64**	**1.2**
PW17-02	Porewater	PW17-02	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	D	**0.38**	<1.0
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Nov-17	L2023753	D	<10.	<50.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-03 @	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**23.7**	<10.
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	**4.1**	<20.
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	D	**4.5**	<10.
PW17-03	Porewater	PW17-03	HR ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	23-Mar-18	L2071889	D	**0.83**	**4.7**
PW17-03	Porewater	PW17-03	HR ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	D	<2.	<10.
PW17-03	Porewater	PW17-03	HR ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**0.66**	<3.
PW17-03	Porewater	PW17-03	HR ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	<0.5	<3.
PW17-03	Porewater	PW17-03	HR ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	D	<0.50	<3.0
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	**0.58**	<1.0
PW17-03	Porewater	PW17-03	CRC ICPMS	C	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	D	**0.4**	<1.0
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	D	<4.	<20.
PW17-04 @	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	D	**40.4**	**13.**
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	D	**5.2**	<10.
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	D	**3.6**	<5.
PW17-04	Porewater EAZ	PW17-04	HR ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	23-Mar-18	L2071889	D	<0.5	**4.5**
PW17-04	Porewater EAZ	PW17-04	HR ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	D	<1.	<5.
PW17-04	Porewater EAZ	PW17-04	HR ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	D	<0.5	**3.9**
PW17-04	Porewater EAZ	PW17-04	HR ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	D	<0.5	<3.
PW17-04	Porewater EAZ	PW17-04	HR ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	D	<0.50	<3.0
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	D	<0.20	**1.3**
PW17-04	Porewater EAZ	PW17-04	CRC ICPMS	U	W FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Dec-19	L2395640	D	<0.20	<1.0
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	D	<4.	<20.
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	<2.	<10.
DUP2 (PW17-05)	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2022366	D	<2.	<10.
QA/QC RPD										13-Dec-17			---	---
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	**1.63**	<2.
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	D	**2.43**	**2.2**
PW17-05	Porewater EAZ	PW17-05	HR ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	23-Mar-18	L2071889	D	**1.36**	<3.
PW17-05	Porewater EAZ	PW17-05	HR ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	D	**0.79**	<1.
PW17-05	Porewater EAZ	PW17-05	HR ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	D	**1.52**	<3.
PW17-05	Porewater EAZ	PW17-05	HR ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	D	**15.8**	<3.
PW17-05	Porewater EAZ	PW17-05	HR ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	D	**4.76**	<2.0
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	D	**1.6**	**3.7**
PW17-05	Porewater EAZ	PW17-05	CRC ICPMS	P	W FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Dec-19	L2395640	D	**3.23**	<1.0

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	D	<4.	<20.
PW17-06 @	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	D	**23.1**	<10.
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	D	**3.6**	<10.
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	D	**2.25**	**2.4**
PW17-06	Porewater	PW17-06	HR ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	23-Mar-18	L2071889	D	<1.	<5.
PW17-06	Porewater	PW17-06	HR ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	D	<0.4	<2.
PW17-06	Porewater	PW17-06	HR ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	<3.
PW17-06	Porewater	PW17-06	HR ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	D	<0.5	<3.
PW17-06	Porewater	PW17-06	HR ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	D	<0.50	<3.0
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	D	<0.20	<1.0
PW17-06	Porewater	PW17-06	CRC ICPMS	P	W FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Dec-19	L2395640	D	<0.20	<1.0
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Nov-17	L2023092	D	<10.	<50.
PW17-07 @	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Dec-17	L2034402	D	**14.**	<50.
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	15-Jan-18	L2045142	D	**4.6**	**22.**
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-07	Porewater EAZ	PW17-07	HR ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	21-Mar-18	L2070802	D	<0.5	**9.8**
PW17-07	Porewater EAZ	PW17-07	HR ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	17-Apr-18	L2081248	D	**0.58**	**5.2**
PW17-07	Porewater EAZ	PW17-07	HR ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	12-Jun-18	L2111276	D	**0.58**	**6.4**
PW17-07	Porewater EAZ	PW17-07	HR ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	10-Sep-18	L2161513	D	**0.86**	**5.8**
PW17-07	Porewater EAZ	PW17-07	HR ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	3-Dec-18	L2205028	D	**0.52**	<3.0
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	5-Jun-19	L2286145	D	**0.48**	**3.3**
PW17-07	Porewater EAZ	PW17-07	CRC ICPMS	S	W FPTS	0.70-1.00	0.7	1	Beach sand	11-Dec-19	L2395640	D	**0.27**	**1.4**
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	D	<10.	<50.
PW17-08 @	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	D	**49.3**	**11.**
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	D	<4.	<20.
PW17-08	Porewater	PW17-08	HR ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	D	**1.73**	**6.7**
PW17-08	Porewater	PW17-08	HR ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	D	<2.	<10.
PW17-08	Porewater	PW17-08	HR ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	D	**0.63**	**3.4**
PW17-08	Porewater	PW17-08	HR ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	D	<0.5	<3.
PW17-08	Porewater	PW17-08	HR ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	3-Dec-18	L2205028	D	<0.50	<3.0
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	D	**0.63**	<1.0
PW17-08	Porewater	PW17-08	CRC ICPMS	C	W FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Dec-19	L2395640	D	**0.39**	<1.0
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	<4.	<20.

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													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-09 @	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	D	**35.7**	**18.**
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	D	<4.	<20.
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	D	<4.	<20.
PW17-09	Porewater	PW17-09	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	<0.5	<3.
PW17-09	Porewater	PW17-09	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	D	<0.5	<3.
PW17-09	Porewater	PW17-09	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	D	<0.5	<3.
PW17-09	Porewater	PW17-09	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	D	<0.5	<3.
PW17-09	Porewater	PW17-09	HR ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	D	<0.20	**1.2**
PW17-09	Porewater	PW17-09	CRC ICPMS	U	W FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Dec-19	L2395640	D	<0.20	**1.3**
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	D	<10.	<50.
PW17-10 @	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**33.7**	<10.
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	<10.	<50.
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-10	Porewater	PW17-10	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**0.85**	**4.**
PW17-10	Porewater	PW17-10	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	**0.66**	**4.2**
PW17-10	Porewater	PW17-10	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**1.18**	<3.
PW17-10	Porewater	PW17-10	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	**0.92**	**4.4**
PW17-10	Porewater	PW17-10	HR ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	3-Dec-18	L2205028	D	**0.69**	**4.7**
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	D	**0.72**	**3.5**
PW17-10	Porewater	PW17-10	CRC ICPMS	S	W FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-19	L2395640	D	**0.77**	**1.4**
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Nov-17	L2023753	D	<4.	<20.
PW17-11 @	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Dec-17	L2034402	D	**45.2**	**10.**
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	14-Feb-18	L2056918	D	**6.7**	<20.
PW17-11	Porewater	PW17-11	HR ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	21-Mar-18	L2070802	D	<0.50	<3.0
PW17-11	Porewater	PW17-11	HR ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	16-Apr-18	L2080621	D	<2.	<10.
PW17-11	Porewater	PW17-11	HR ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	12-Jun-18	L2111276	D	<0.50	<3.0
PW17-11	Porewater	PW17-11	HR ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Sep-18	L2161513	D	<0.50	<3.0
PW17-11	Porewater	PW17-11	HR ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	3-Dec-18	L2205028	D	<0.50	<3.0
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	4-Jun-19	L2285149	D	<4.0	<20
PW17-11	Porewater	PW17-11	CRC ICPMS	C	W FPTS	0.74-1.10	0.74	1.1	Beach sand	10-Dec-19	L2395326	D	<0.20	<1.0
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	D	<10.	<50.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-12 @	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**52.1**	**11.**
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	**5.7**	<20.
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	D	<10.	<50.
PW17-12	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	<0.5	<3.
DUP7 (PW17-12)	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**0.51**	<3.
QA/QC RPD										21-Mar-18			---	---
PW17-12	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	<0.5	<3.
PW17-12	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**0.98**	**18.7**
PW17-12	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	**0.78**	<3.
PW17-12	Porewater	PW17-12	HR ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	**0.59**	<3.0
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	**0.64**	<1.0
PW17-12	Porewater	PW17-12	CRC ICPMS	C	IBA	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	**0.32**	<1.0
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	<4.	<20.
PW17-13 @	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	D	**39.5**	**11.**
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	D	**3.7**	<10.
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	13-Feb-18	L2056920	D	<4.	<20.
PW17-13	Porewater	PW17-13	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	**1.06**	**1.9**
PW17-13	Porewater	PW17-13	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	D	**2.23**	<3.
PW17-13	Porewater	PW17-13	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	D	**1.15**	<3.
PW17-13	Porewater	PW17-13	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Sep-18	L2161513	D	**1.45**	**3.1**
PW17-13	Porewater	PW17-13	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	D	**1.47**	<3.0
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	5-Jun-19	L2286145	D	**1.25**	**1.7**
PW17-13	Porewater	PW17-13	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	D	**1.2**	**1.6**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	<2.	<10.
PW17-14 @	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**40.3**	**13.**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-14	Porewater	PW17-14	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**1.**	**8.**
PW17-14	Porewater	PW17-14	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	**0.92**	**7.8**
PW17-14	Porewater	PW17-14	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**0.65**	**4.2**
PW17-14	Porewater	PW17-14	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	**0.59**	<3.
PW17-14	Porewater	PW17-14	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	**0.85**	**3.4**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	5-Jun-19	L2286145	D	**0.6**	**3.6**
PW17-14	Porewater	PW17-14	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	**0.83**	**3.5**

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Nov-17	L2023753	D	<4.	<20.
PW17-15 @	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	13-Dec-17	L2035368	D	**22.5**	<20.
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	D	**31.7**	<20.
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	D	<4.	<20.
PW17-15	Porewater	PW17-15	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	D	<0.5	<3.
PW17-15	Porewater	PW17-15	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	17-Apr-18	L2081248	D	<0.5	<3.
PW17-15	Porewater	PW17-15	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	D	<0.5	**4.4**
PW17-15	Porewater	PW17-15	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Sep-18	L2161513	D	<0.5	<3.
PW17-15	Porewater	PW17-15	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	D	<4.0	<20
PW17-15	Porewater	PW17-15	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	D	**0.21**	**1.2**
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Nov-17	L2023092	D	<4.	<20.
PW17-16 @	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	D	**29.7**	**10.**
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	D	**1.**	**4.6**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	D	**1.07**	**4.7**
QA/QC RPD										16-Jan-18			---	---
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	D	**1.6**	**4.**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Feb-18	L2056918	D	**7.46**	**11.5**
QA/QC RPD										14-Feb-18			129.4%	---
PW17-16	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	D	**0.34**	**5.**
PW17-16	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	D	<0.2	**1.7**
DUP1 (PW17-16)	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	D	<0.2	**1.7**
QA/QC RPD										18-Apr-18			---	---
PW17-16	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	D	**0.62**	**5.5**
DUP-2 (PW17-16)	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Jun-18	L2111824	D	**0.64**	**6.9**
QA/QC RPD										13-Jun-18			---	22.6%
PW17-16	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	11-Sep-18	L2162362	D	**0.77**	**4.6**
PW17-16	Porewater EAZ	PW17-16	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Dec-18	L2206732	D	<0.20	**1.3**
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	D	**0.33**	**3.7**
PW17-16	Porewater EAZ	PW17-16	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	D	<1.0	<5.0
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	D	**1.48**	**11.5**
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	**1.2**	<4.
DUP3 (PW17-17)	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	**2.24**	<4.
QA/QC RPD										13-Dec-17			60.5%	---
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	**1.4**	**2.5**

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
DUP2 (PW17-17)	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	**1.36**	**2.5**
QA/QC RPD										16-Jan-18			2.9%	---
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	D	**0.37**	**2.6**
DUP2 (PW17-17)	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Feb-18	L2056918	D	**0.4**	**3.**
QA/QC RPD										14-Feb-18			---	---
PW17-17	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	D	<0.2	**1.7**
PW17-17	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	D	<0.2	**1.3**
DUP2 (PW17-17)	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	D	<0.2	**1.5**
QA/QC RPD										18-Apr-18			---	---
PW17-17	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Jun-18	L2111824	D	<0.5	**22.3**
PW17-17	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	D	<0.5	**16.5**
DUP-1 (PW17-17)	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	11-Sep-18	L2162362	D	<0.5	**15.7**
QA/QC RPD										11-Sep-18			---	5.0%
PW17-17	Porewater EAZ	PW17-17	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.20	**1.9**
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	D	<1.0	<5.0
PW17-17	Porewater EAZ	PW17-17	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	D	<0.20	**1.4**
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	D	**3.35**	<5.
DUP3 (PW17-18)	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	D	**3.71**	<5.
QA/QC RPD										15-Nov-17			10.2%	---
PW17-18 @	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	D	**18.3**	<4.
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	D	**1.14**	**2.5**
DUP3 (PW17-18)	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	D	**2.54**	**4.**
QA/QC RPD										16-Jan-18			76.1%	---
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	D	**1.68**	**1.8**
DUP3 (PW17-18)	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Feb-18	L2056918	D	**2.89**	**3.**
QA/QC RPD										14-Feb-18			53.0%	---
PW17-18	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	D	<0.2	**4.1**
PW17-18	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	D	<0.2	<1.
DUP3 (PW17-18)	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	D	<0.2	<1.
QA/QC RPD										18-Apr-18			---	---
PW17-18	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	**7.5**
DUP3 (PW17-18)	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Jun-18	L2111824	D	<0.5	**8.8**
QA/QC RPD										18-Apr-18			---	16.0%
PW17-18	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	D	**0.54**	**34.9**
DUP-2 (PW17-18)	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	11-Sep-18	L2162362	D	**0.6**	**35.**
QA/QC RPD										11-Sep-18			---	0.3%

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-18	Porewater	PW17-18	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Dec-18	L2206732	D	<0.50	<3.0
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	D	<2.0	**15.**
PW17-18	Porewater	PW17-18	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	D	<0.20	**4.8**
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	**2.4**	**8.7**
PW17-19 @	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Dec-17	L2034402	D	**34.9**	**11.6**
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	15-Jan-18	L2045142	D	<1.	<5.
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	13-Feb-18	L2056920	D	**4.3**	**6.2**
PW17-19	Porewater	PW17-19	HR ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	<0.2	**2.4**
PW17-19	Porewater	PW17-19	HR ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	16-Apr-18	L2080621	D	<0.2	**3.4**
PW17-19	Porewater	PW17-19	HR ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	12-Jun-18	L2111276	D	**1.04**	**3.**
PW17-19	Porewater	PW17-19	HR ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Sep-18	L2161513	D	**5.**	**5.**
PW17-19	Porewater	PW17-19	HR ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	4-Jun-19	L2285149	D	**2.9**	<10
PW17-19	Porewater	PW17-19	CRC ICPMS	S	E FPTS	0.87-1.15	0.87	1.15	Weathered Colluvium	10-Dec-19	L2395326	D	**1.02**	**2.6**
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	14-Nov-17	L2022366	D	**2.9**	**6.**
PW17-20 @	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Dec-17	L2034402	D	**36.6**	**8.8**
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	15-Jan-18	L2045142	D	<1.	<5.
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	13-Feb-18	L2056920	D	**2.4**	<5.
PW17-20	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	21-Mar-18	L2070802	D	<0.5	<3.
DUP8 (PW17-20)	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	21-Mar-18	L2070802	D	<0.5	<3.
QA/QC RPD										21-Mar-18			---	---
PW17-20	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	16-Apr-18	L2080621	D	<0.4	<2.
PW17-20	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	12-Jun-18	L2111276	D	<0.5	**5.**
PW17-20	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Sep-18	L2161513	D	<0.5	**3.6**
PW17-20	Porewater EAZ	PW17-20	HR ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Dec-18	L2205928	D	<0.50	**8.1**
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	4-Jun-19	L2285149	D	<2.0	<10
PW17-20	Porewater EAZ	PW17-20	CRC ICPMS	C	E FPTS	0.64-1.00	0.64	1	Beach sand	10-Dec-19	L2395326	D	**0.76**	**2.5**
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Nov-17	---	---	---	---
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-17	---	---	---	---
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	---	---	---	---
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	---	---	---	---
PW17-21	Porewater EAZ	PW17-21	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	D	**0.47**	**1.5**
PW17-21	Porewater EAZ	PW17-21	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	18-Apr-18	L2081868	D	<1.	<5.
PW17-21	Porewater EAZ	PW17-21	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	D	**0.87**	**1.4**

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-21	Porewater EAZ	PW17-21	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Sep-18	L2163271	D	**1.6**	<3.
PW17-21	Porewater EAZ	PW17-21	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	D	**0.95**	**1.9**
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	5-Jun-19	L2286145	D	<1.0	<5.0
PW17-21	Porewater EAZ	PW17-21	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	D	<1.0	<5.0
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Nov-17	L2023092	D	**1.22**	<5.
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	**1.29**	<4.
DUP4 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	**5.02**	<5.
QA/QC RPD										13-Dec-17			118.2%	---
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	<0.4	**2.1**
DUP4 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	<0.4	**2.6**
QA/QC RPD										16-Jan-18			---	---
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	D	**1.22**	**4.1**
DUP4 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	D	**0.67**	**3.1**
QA/QC RPD										15-Feb-18			---	---
PW17-22	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	D	<0.2	**1.8**
DUP 4(PW17-22)	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	D	**0.46**	**2.1**
QA/QC RPD										22-Mar-18			---	---
PW17-22	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	D	<0.2	<1.
DUP 4(PW17-22)	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	18-Apr-18	L2081868	D	<0.2	<1.
QA/QC RPD										18-Apr-18			---	---
PW17-22	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	D	<0.5	**3.1**
DUP 4(PW17-22)	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	D	<0.5	**3.**
QA/QC RPD										14-Jun-18			---	---
PW17-22	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	10-Sep-18	L2161513	D	<0.5	**5.2**
PW17-22	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.20	**1.5**
DUP-3 (PW17-22)	Porewater EAZ	PW17-22	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Dec-18	L2206732	D	<0.20	**1.5**
QA/QC RPD										5-Dec-18			---	---
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	D	<2.0	<10
DUP-2 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	5-Jun-19	L2286145	D	<4.0	<20
QA/QC RPD										5-Jun-19			---	---
PW17-22	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	D	**0.53**	**1.2**
DUP-1 (PW17-22)	Porewater EAZ	PW17-22	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	D	**0.49**	<1.
QA/QC RPD										12-Dec-19			---	---
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Nov-17	L2023092	D	**1.64**	<3.5
PW17-23 @	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	D	**19.**	<4.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	D	**0.57**	<1.
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	D	**0.41**	**1.8**
PW17-23	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	D	<0.5	<3.
PW17-23	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	D	<0.2	<1.
PW17-23	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	D	<0.5	**7.3**
PW17-23	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	10-Sep-18	L2161513	D	<0.5	**14.8**
PW17-23	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	D	<0.40	**2.**
DUP-4 (PW17-23)	Porewater	PW17-23	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	D	<0.20	**1.7**
QA/QC RPD										6-Dec-18			---	---
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	D	<2.0	**16.**
DUP-3 (PW17-23)	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	5-Jun-19	L2286145	D	<4.0	<20
QA/QC RPD										5-Jun-19			---	---
PW17-23	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	D	**0.33**	**1.4**
DUP-2 (PW17-23)	Porewater	PW17-23	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	D	**0.32**	**2.4**
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Nov-17	L2023092	D	<10.	<50.
PW17-24 @	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**62.7**	**14.**
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	**16.7**	<20.
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-24	Porewater	PW17-24	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	<0.5	<3.
PW17-24	Porewater	PW17-24	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	<0.5	<3.
PW17-24	Porewater	PW17-24	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**0.6**	<3.
PW17-24	Porewater	PW17-24	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	**0.72**	<3.
PW17-24	Porewater	PW17-24	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	<4.0	<20
PW17-24	Porewater	PW17-24	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	<0.2	<1.
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	<4.	<20.
DUP2 (PW17-25)	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	<4.	<20.
QA/QC RPD										14-Nov-17			---	---
PW17-25 @	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**54.3**	**11.**
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	13-Feb-18	L2056920	D	<4.	<20.
PW17-25	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**0.89**	<3.
DUP9 (PW17-25)	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	21-Mar-18	L2070802	D	**0.96**	<3.
QA/QC RPD										21-Mar-18			---	---
PW17-25	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	D	<1.	<5.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-25	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	<1.	<3.
PW17-25	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Sep-18	L2161513	D	**1.15**	<3.
PW17-25	Porewater	PW17-25	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	**0.88**	<3.0
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	**1.56**	**2.6**
PW17-25	Porewater	PW17-25	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	**0.68**	<1.0
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Nov-17	L2023753	D	**0.84**	**7.7**
PW17-26 @	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	13-Dec-17	L2035368	D	**19.3**	**7.5**
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	16-Jan-18	L2045816	D	**5.45**	**7.3**
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	15-Feb-18	L2057618	D	**8.96**	**10.**
PW17-26	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	D	**0.26**	**2.3**
DUP 1(PW17-26)	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	22-Mar-18	L2071404	D	**0.27**	**2.1**
QA/QC RPD										22-Mar-18			---	---
PW17-26	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	17-Apr-18	L2081248	D	<0.5	<3.
PW17-26	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	14-Jun-18	L2112662	D	<0.2	**1.2**
PW17-26	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Sep-18	L2163271	D	<0.5	**8.2**
PW17-26	Porewater EAZ	PW17-26	HR ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Dec-18	L2207439	D	**0.21**	**2.**
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	D	**0.41**	**3.4**
DUP 1(PW17-26)	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	6-Jun-19	L2287095	D	<0.40	**3.5**
QA/QC RPD										6-Jun-19			---	---
PW17-26	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	D	**0.3**	**2.1**
DUP 3 (PW17-26)	Porewater EAZ	PW17-26	CRC ICPMS	U	E FPTS	0.45-0.75	0.45	0.75	Weathered Colluvium	12-Dec-19	L2396150	D	**0.22**	**1.6**
QA/QC RPD										12-Dec-19			---	---
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Nov-17	L2023753	D	<2.	<10.
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	13-Dec-17	L2035368	D	**4.12**	<2.
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	16-Jan-18	L2045816	D	**6.48**	**7.5**
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	15-Feb-18	L2057618	D	**5.7**	**7.8**
PW17-27	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	D	<2.	<1.
DUP 2(PW17-27)	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	22-Mar-18	L2071404	D	<2.	<1.
QA/QC RPD										22-Mar-18			---	---
PW17-27	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	17-Apr-18	L2081248	D	<0.5	<3.
PW17-27	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	14-Jun-18	L2112662	D	**0.95**	<3.
PW17-27	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	D	<0.5	<3.
DUP-3(PW17-27)	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Sep-18	L2163271	D	<0.5	<3.
QA/QC RPD										12-Sep-18			---	---
PW17-27	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	D	<0.20	<1.0

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
DUP-5 (PW17-27)	Porewater EAZ	PW17-27	HR ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Dec-18	L2207439	D	<0.20	<1.0
QA/QC RPD										6-Dec-18			---	---
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	6-Jun-19	L2287095	D	**0.4**	**1.9**
PW17-27	Porewater EAZ	PW17-27	CRC ICPMS	P	E FPTS	0.64-1.00	0.64	1	Imported sand and AG/OC	12-Dec-19	L2396150	D	**0.31**	**1.2**
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Nov-17	L2023753	D	<2.	<10.
PW17-28 @	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	13-Dec-17	L2035368	D	**29.4**	**6.**
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	16-Jan-18	L2045816	D	**0.33**	<1.
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	15-Feb-18	L2057618	D	**10.7**	**9.6**
PW17-28	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	D	**0.99**	<1.
DUP 3(PW17-28)	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	22-Mar-18	L2071404	D	<2.	<1.
QA/QC RPD										22-Mar-18			---	---
PW17-28	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	18-Apr-18	L2081868	D	<0.2	<1.
PW17-28	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	14-Jun-18	L2112662	D	<0.5	**3.5**
PW17-28	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	D	**1.44**	**6.5**
DUP-4(PW17-28)	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Sep-18	L2163271	D	**1.52**	**7.**
QA/QC RPD										12-Sep-18			5.4%	7.4%
PW17-28	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	D	**0.2**	<1.0
DUP-6 (PW17-28)	Porewater	PW17-28	HR ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Dec-18	L2207439	D	<0.20	<1.0
QA/QC RPD										6-Dec-18			---	---
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	6-Jun-19	L2287095	D	<4.0	<20
PW17-28	Porewater	PW17-28	CRC ICPMS	P	E FPTS	0.84-1.20	0.84	1.2	Imported sand and AG/PAC	12-Dec-19	L2396150	D	<0.2	**1.4**
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Nov-17	L2022366	D	<4.	<20.
PW17-29 @	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Dec-17	L2034402	D	**41.7**	**11.**
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	15-Jan-18	L2045142	D	**4.9**	<20.
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	14-Feb-18	L2056918	D	**3.8**	<10.
PW17-29	Porewater	PW17-29	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	21-Mar-18	L2070802	D	**0.65**	<3.
PW17-29	Porewater	PW17-29	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	17-Apr-18	L2081248	D	**0.51**	<3.
PW17-29	Porewater	PW17-29	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	12-Jun-18	L2111276	D	**0.72**	<3.
PW17-29	Porewater	PW17-29	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	11-Sep-18	L2162362	D	**0.74**	<3.
PW17-29	Porewater	PW17-29	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	4-Jun-19	L2285149	D	<2.0	<10
PW17-29	Porewater	PW17-29	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Weathered Colluvium	10-Dec-19	L2395326	D	<0.2	**2.**
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Nov-17	L2022366	D	<4.	<20.
PW17-30 @	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Dec-17	L2034402	D	**48.6**	**10.**

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	15-Jan-18	L2045142	D	<4.	<20.
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	14-Feb-18	L2056918	D	**5.3**	<10.
PW17-30	Porewater	PW17-30	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	21-Mar-18	L2070802	D	**0.9**	<3.
PW17-30	Porewater	PW17-30	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	16-Apr-18	L2080621	D	<1.	<5.
PW17-30	Porewater	PW17-30	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	12-Jun-18	L2111276	D	**1.04**	<3.
PW17-30	Porewater	PW17-30	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	11-Sep-18	L2162362	D	**1.1**	<3.
PW17-30	Porewater	PW17-30	HR ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Dec-18	L2205928	D	**0.74**	<3.0
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	4-Jun-19	L2285149	D	<4.0	<20
PW17-30	Porewater	PW17-30	CRC ICPMS	C	E FPTS	0.84-1.20	0.84	1.2	Beach sand	10-Dec-19	L2395326	D	**0.63**	<1.0
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	<4.	**26.**
PW17-31 @	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	D	**37.5**	<20.
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	D	**2.1**	<10.
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	D	**5.1**	**7.8**
PW17-31	Porewater	PW17-31	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	D	**0.98**	<3.
PW17-31	Porewater	PW17-31	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	**1.18**	<3.
PW17-31	Porewater	PW17-31	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	**0.98**	<3.
PW17-31	Porewater	PW17-31	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Sep-18	L2163271	D	**1.52**	**8.8**
PW17-31	Porewater	PW17-31	HR ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	**0.83**	<3.0
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	<4.0	<20
PW17-31	Porewater	PW17-31	CRC ICPMS	U	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	**0.75**	**2.6**
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	**2.8**	**11.7**
PW17-32 @	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Dec-17	L2033765	D	**29.7**	<20.
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Jan-18	L2045816	D	**2.8**	<10.
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	D	**3.**	**19.3**
PW17-32	Porewater	PW17-32	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	D	**0.62**	**8.7**
PW17-32	Porewater	PW17-32	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	17-Apr-18	L2081248	D	<0.5	**4.7**
PW17-32	Porewater	PW17-32	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	<0.5	**4.2**
PW17-32	Porewater	PW17-32	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	D	**0.73**	<3.
PW17-32	Porewater	PW17-32	HR ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	**1.01**	**8.8**
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	**1.3**	**6.1**
PW17-32	Porewater	PW17-32	CRC ICPMS	S	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	**2.22**	**6.8**
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Nov-17	L2022366	D	<2.	<10.
PW17-33 @	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Dec-17	L2034402	D	**36.3**	<10.
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	15-Jan-18	L2045142	D	<4.	<20.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	14-Feb-18	L2056918	D	<2.	<10.
PW17-33	Porewater	PW17-33	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	22-Mar-18	L2071404	D	<0.5	<3.
PW17-33	Porewater	PW17-33	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	16-Apr-18	L2080621	D	<1.	<5.
PW17-33	Porewater	PW17-33	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	12-Jun-18	L2111276	D	<0.5	**5.6**
PW17-33	Porewater	PW17-33	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	11-Sep-18	L2162362	D	<0.5	**3.1**
PW17-33	Porewater	PW17-33	HR ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Dec-18	L2205928	D	<0.50	<3.0
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	4-Jun-19	L2285149	D	<1.0	<5.0
PW17-33	Porewater	PW17-33	CRC ICPMS	C	E FPTS	0.85-1.15	0.85	1.15	Beach sand	10-Dec-19	L2395326	D	<0.2	**1.7**
F-Blank-1A #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	<2.	**17.**
F-Blank-1B #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	<2.	<1.
F-Blank-1C #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	**0.85**	<1.
F-Blank-2A #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	<2.	<1.
F-Blank-2B #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	**0.68**	<1.
F-Blank-2C #	Deionized water	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	19-Mar-18	L2070133	D	**0.7**	<1.
R-BLANK	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	D	**0.22**	<1.
R-BLANK	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	22-Mar-18	L2071404	D	<2.	<1.
R-BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	16-Apr-18	L2080621	D	<0.2	<1.
R-BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	12-Jun-18	L2111276	D	<0.2	<1.
R-BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	17-Apr-18	L2081248	D	<0.5	<3.
R-BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	13-Jun-18	L2111824	D	<0.2	<1.
R-BLANK-3	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112662	D	<0.2	<1.
R-BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	10-Sep-18	L2161513	D	<0.2	<1.
R-BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	11-Sep-18	L2162362	D	<0.5	<3.
R BLANK-3	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	12-Sep-18	L2163271	D	<0.5	<3.
R-BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	D	<0.50	<3.0
R-BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	4-Dec-18	L2205928	D	<0.20	<1.0
R-BLANK-3	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	5-Dec-18	L2206732	D	<0.20	<1.0
R-BLANK-1	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	5-Jun-19	L2286145	D	<0.20	<1.0
R-BLANK-2	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	5-Jun-19	L2286145	D	<0.20	<1.0
R-BLANK-1	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	10-Dec-19	L2395326	D	<0.20	<1.0
R-BLANK-2	NA	NA	CRC ICPMS	NA	NA	NA	NA	NA	NA	11-Dec-19	L2395640	D	<0.20	<1.0
TRAVEL BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	20-Mar-18	L2070135	T	<0.5	<3.
T-BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	T	<2.	<1.
T-BLANK-3	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	21-Mar-18	L2070802	T	<2.	<1.

TABLE A3
TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE POST FPTS CONSTRUCTION
PARKLAND BURNABY REFINERY
FORESHORE 2020 AND 2021 MONITORING REPORT

													Copper	Zinc
Upper Cap Concentrations[1]													200	1,000
RBMT[2]													6.2	90
Reported Detection Limit (Dissolved)													0.2	1
Sample ID	**Matrix**	**Sample Location**	**Method**	**Well Location**	**Location Area**	**Screened Interval (m)**	**Top Screen (m)**	**Bottom Screen (m)**	**Lithology of Screen Interval (Primary)**	**Sample Date**	**Report**	**Total/ Dissolved**		
T-BLANK-4	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	22-Mar-18	L2071404	T	<0.5	<3.
T-BLANK-5	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	23-Mar-18	L2071889	T	<0.5	<3.
T-BLANK-5	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112693	T	<0.5	<3.
T-BLANK-6	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	14-Jun-18	L2112693	T	<0.5	<3.
TRAVEL BLANK-1	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	T	<0.50	<3.0
TRAVEL BLANK-2	NA	NA	HR ICPMS	NA	NA	NA	NA	NA	NA	3-Dec-18	L2205030	T	<0.50	<3.0

Notes
< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.
@ - AECOM considers the December 2017 porewater and surface water dissolved copper data as suspect.
# - Deionized water filter assessment samples.
1 - Protocol 11 Table 6. Water Upper Cap Concentrations for Schedule 3.2 Substances
2 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.

BOLD	Sam Sample concentration is detected
SHADE	Sam Sample concentration greater than RBMT
SHADE	Sample Concentration greater than Upper Cap

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - aquagate
C - Compliance well (Post-construction)
CRC ICPMS - Collision/Reaction Cells Inductively Coupled Plasma Mass Spectrometry
D - dissolved metals
EAZ - ecologically active zone
E FPTS - Eastern Foreshore Passive Treatment System
HR ICPMS - High Resolution Inductively Coupled Plasma Mass Spectrometry
NBO - near bottom samples
NS - no standard established for indicated parameter.
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
T - total metals
U - Up gradient well (Post-construction)
W FPTS - Western Foreshore Passive Treatment System

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
Pre-Construction FPTS																																				
DSI Samples																																				
Western IRA Barrier																																				
P2.5-7I	Porewater EAZ	P2.5-7	NA	WB	0.7-0.9	0.7	0.9	Beach sand	---	25-Feb-11	D	<5.0	<0.50	<2.0	90.6	<0.50	1,030	<0.10	275,000	<0.50	1.03	1.47	<10	<0.30	62	294,000	857	51.3	3.08	<2.0	3,800,000	0.084	<5.0	28	1.03	4.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	10-May-11	---	Well Not Sampled																								
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Jun-11	---	Well Not Sampled																								
P2.5-7D	Porewater	P2.5-7	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	D	<5.0	<0.50	<2.0	83.9	<0.50	1,870	<0.10	259,000	<0.50	1.89	1.73	<10	<0.30	78	555,000	1,140	28.2	1.79	<2.0	4,310,000	<0.050	<5.0	2.6	1.16	14.4
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	20-Apr-11	D	<5.0	<0.50	<2.0	58.2	<0.50	480	<0.050	123,000	<0.50	2.08	<0.50	<10	<0.30	<20	185,000	4,570	61	1.44	<2.0	1,020,000	<0.050	<5.0	2.37	0.84	31.4
P3-3-W #	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	20-Apr-11	---	Well Not Sampled																								
P3-7D	Porewater	P3-7	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Feb-11	D	<5.0	<0.50	<2.0	254	<0.50	860	0.756	131,000	<0.50	9.84	1.32	<10	<0.30	22	218,000	5,140	<2.0	27.1	<2.0	1,880,000	0.162	<5.0	1.58	<0.50	9.4
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Apr-11	D	<5.0	<0.50	<2.0	309	<0.50	710	<0.050	130,000	<0.50	13.8	<0.50	2,180	<0.30	34	182,000	13,400	5.7	8.58	<2.0	1,700,000	<0.050	<5.0	19	<0.50	7.1
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	---	Well Not Sampled																								
P3-12S	Porewater EAZ	P3-12	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	21-Feb-11	D	29.4	<0.50	<2.0	86.9	<0.50	1,600	0.116	182,000	<0.50	0.054	1.06	<10	<0.30	62	476,000	5.35	4.8	2.07	<2.0	4,000,000	0.124	<5.0	2.44	<0.50	26.7
P3-12D	Porewater	P3-12	NA	WB	1.1-1.3	1.1	1.3	Beach sand	---	21-Feb-11	D	5.5	<0.50	<2.0	15.7	<0.50	1,220	<0.050	130,000	<0.50	0.115	1.22	<10	<0.30	50	340,000	77.8	6.3	0.92	<2.0	2,640,000	<0.050	<5.0	1.58	0.76	24.4
P3R-7S	Porewater EAZ	P3R-7	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	18-Apr-11	D	<5.0	<0.50	<2.0	223	<0.50	1,550	0.291	258,000	<0.50	11.5	<0.50	<10	<0.30	64	468,000	5,630	11.4	14.5	<2.0	3,930,000	0.233	<5.0	2.85	<0.50	4.8
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	18-Apr-11	D	7.8	<0.50	<2.0	35.5	<0.50	310	<0.050	45,100	<0.50	0.174	<0.50	16	<0.30	<20	48,100	502	19	<0.50	<2.0	428,000	<0.050	<5.0	0.119	<0.50	<3.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	18-Apr-11	D	12.7	0.52	<2.0	22.4	<0.50	120	<0.050	26,600	<0.50	0.125	<0.50	<10	<0.30	<20	8,250	316	12.9	<0.50	<2.0	82,000	<0.050	<5.0	0.103	<0.50	<3.0
P3.5-7S	Porewater EAZ	P3.5-7	NA	WB	0.2-0.4	0.2	0.4	Beach sand	---	22-Feb-11	D	6.6	<0.50	<2.0	166	<0.50	1,790	1.7	250,000	<0.50	12.2	1.81	<10	<0.30	82	518,000	916	7.3	50	2.6	4,440,000	1.03	<5.0	2.61	<0.50	15.6
P3.5-7I	Porewater	P3.5-7	NA	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	23-Feb-11	D	<5.0	<0.50	<2.0	93.8	<0.50	1,030	<0.050	169,000	<0.50	1	1.3	<10	<0.30	38	316,000	2,690	19.2	1.16	<2.0	2,300,000	<0.050	<5.0	4.44	2.68	9.6
P3.5-7D	Porewater	P3.5-7	NA	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Feb-11	D	<5.0	<0.50	<2.0	100	<0.50	460	<0.050	89,600	<0.50	2.2	1.03	<10	<0.30	27	126,000	1,060	6.8	6.25	<2.0	1,090,000	0.055	<5.0	6.51	0.96	12
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	20-Apr-11	D	<5.0	<0.50	<2.0	258	<0.50	380	<0.050	152,000	<0.50	4.38	<0.50	<10	<0.30	<20	176,000	4,050	7.5	1.74	<2.0	982,000	<0.050	<5.0	4.11	<0.50	<3.0
Eastern IRA Barrier																																				
P5-3-0.4S	Grab sample	P5-3	NA	EB	Grab sample	Grab sample	Grab sample	---	---	11-Feb-11	---	Well Not Sampled																								
P5-3S	Porewater EAZ	P5-3	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Feb-11	D	5.4	<0.50	<2.0	256	<0.50	820	0.894	173,000	<0.50	12	0.63	<10	<0.30	<20	291,000	1,360	2.2	24.9	<2.0	2,190,000	0.379	<5.0	0.384	<0.50	10.6
P5-3I	Porewater EAZ	P5-3	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Feb-11	D	<5.0	<0.50	<2.0	72	<0.50	240	<0.050	59,000	<0.50	6.06	0.56	<10	<0.30	<20	45,900	1,410	7.4	7.11	11.5	539,000	<0.050	<5.0	0.19	<0.50	3.4
P5-3D	Porewater	P5-3	NA	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	23-Feb-11	D	<5.0	<0.50	<2.0	84.3	<0.50	250	0.077	82,100	<0.50	9.21	0.88	<10	<0.30	<20	68,800	1,780	<2.0	6.41	<2.0	317,000	<0.050	<5.0	<0.050	<0.50	52.4
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Apr-11	D	<5.0	<0.50	<2.0	83.9	<0.50	250	0.052	73,400	<0.50	12.1	0.9	<30	<0.30	<20	65,700	3,480	<2.0	6.67	<2.0	414,000	<0.050	<5.0	<0.050	<0.50	728
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Apr-11	D	<5.0	<0.50	<2.0	63.7	<0.50	220	0.08	62,000	<0.50	13.8	0.87	<10	<0.30	<20	53,100	5,570	<2.0	7.88	<2.0	332,000	<0.050	<5.0	<0.050	<0.50	283
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Jun-11	---	Well Not Sampled																								
P5.5-3-W #	Porewater EAZ	P5.5-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	19-Apr-11	D	5.4	<0.50	<2.0	148	<0.50	780	0.333	307,000	<0.50	11.2	0.95	2,850	<0.30	85	305,000	8,030	5.5	11	<2.0	2,150,000	0.149	<5.0	4.02	<0.50	13.2
P6-3S *	Porewater EAZ	P6-3	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	25-Jan-11	T	296	<0.50	2.9	17.9	<0.50	410	<0.10	41,700	1.17	1.94	11	6,100	5.15	<20	36,200	1,970	36	<3.0 U	<2.0	316,000	0.078	30.9	0.507	4.54	8.9
P6-3S	Porewater EAZ	P6-3	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-3S *	Porewater EAZ	P6-3	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	27-Jan-11	D	5.2	<0.50	<2.0	14.9	<0.50	170	<0.050	48,400	<0.10	2.53	<0.50	2,370	<0.30	<20	37,800	2,810	3.1	0.64	<2.0	212,000	0.051	<5.0	0.17	<0.50	<3.0
P6-3S *	Porewater EAZ	P6-3	NA	EB	0.2-0.6	0.2	0.6	Weathered Colluvium	---	11-Feb-11	---	Well Not Sampled																								
P6-3I *	Porewater EAZ	P6-3	NA	EB	0.5-0.7	0.5	0.7	Weathered Colluvium	---	9-Feb-11	D	6.8	<0.50	<2.0	50.5	<0.50	<10	0.116	46,700	<0.40	15.5	0.57	91	<0.30	<20	15,800	4,170	<2.0	5.63	<2.0	36,100	<0.050	<5.0	0.068	1.06	6.5
P6-3D *	Porewater	P6-3	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	D	7.0	<0.50	<2.0	19.5	<0.50	<10	<0.050	47,800	<0.40	12.8	<0.50	2,830	<0.30	<20	16,600	4,480	<2.0	1.16	<2.0	16,200	<0.050	<5.0	<0.050	<0.50	8.3
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Apr-11	D	10.3	<0.50	<2.0	57.8	<0.50	330	<0.050	45,000	<0.50	2.95	<0.50	<10	<0.30	<20	33,500	1,810	24.1	4.15	<2.0	334,000	<0.050	<5.0	0.706	<0.50	<3.0
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	D	5.1	0.54	<2.0	92.5	<0.50	190	<0.050	75,200	<0.50	3.02	<0.50	59	<0.30	<20	25,200	1,080	20.5	6.79	<2.0	177,000	<0.050	<5.0	1.17	<0.50	<3.0
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Apr-11	D	<5.0	<0.50	<2.0	67.8	<0.50	200	<0.050	61,600	<0.50	0.61	<0.50	<10	<0.30	<20	25,800	791	12.4	1.23	<2.0	158,000	<0.050	<5.0	0.123	<0.50	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Feb-11	D	9.9	0.53	<2.0	95.1	<0.50	1,510	0.481	111,000	<0.50	3.53	2.2	<10	<0.30	76	272,000	364	11.6	14.3	2.6	3,500,000	0.498	<5.0	6.94	<0.50	7.2
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Feb-11	D	8.0	<0.50	<2.0	81.7	<0.50	2,060	<0.050	184,000	<0.40	5.09	<0.50	92	<0.30	83	536,000	446	6.4	5.58	<2.0	4,630,000	<0.050	<5.0	8.01	1.15	<3.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Feb-11	D	<5.0	<0.50	<2.0	64.9	<0.50	1,460	0.343	167,000	<0.40	5.11	1.54	31	<0.30	65	382,000	792	3.3	7.05	<2.0	3,690,000	0.127	<5.0	4.13	1.73	30.4
P7-3-W #	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Apr-11	D	11.2	<0.50	<2.0	76.6	<0.50	760	0.106	188,000	<0.50	7.11	<0.50	1,600	<0.30	65	178,000	5,270	3.9	6.24	<2.0	1,650,000	0.052	<5.0	2.71	0.6	9.4
P8-3S *	Porewater EAZ	P8-3	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Jan-11	D	8.2	0.76	<2.0	163	<0.50	400	0.941	158,000	<0.40	10.1	1.74	<10	<0.30	<20	121,000	3,750	<2.0	27.6	<2.0	1,060,000	0.338	<5.0	1.86	<0.50	6.1
P8-3S *	Porewater EAZ	P8-3	NA	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Feb-11	---	Well Not Sampled																								
P8-3D *	Porewater EAZ	P8-3	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	27-Jan-11	D	<5.0	0.65	<2.0	167	<0.50	200	0.277	167,000	<0.40	3.43	1.35	<10	<0.30	<20	78,800	3,000	3.1	12.7	4	697,000	0.109	<5.0	5.12	0.8	6.8
P8-3D *	Porewater EAZ	P8-3	NA	EB	0.9-1.1	0.9	1.1	Colluvium	---	8-Feb-11	---	Well Not Sampled																								
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Apr-11	D	6.4	0.91	<2.0	91.7	<0.50	570	<0.050	80,700	<0.50	1.6	<0.50	<10	<0.30	23	56,300	1,270	53.7	3.77	<2.0	641,000	<0.050	<5.0	2.38	0.54	<3.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Apr-11	D	7.3	0.56	<2.0	120	<0.50	110	0.111	116,000	<0.50	3.93	2.35	<10	<0.30	<20	28,900	1,420	15.2	11.9	<2.0	127,000	0.111	<5.0	5.33	<0.50	<3.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	6-Apr-11	D	6.3	<0.50	<2.0	73.5	<0.50	130	<0.050	100,000	<0.50	0.334	<0.50	<10	<0.30	<20	30,700	668	14	1.11	<2.0	55,500	<0.050	<5.0	0.056	<0.50	<3.0
P8-12S	Porewater EAZ	P8-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	28-Jan-11	---	Well Not Sampled																								
P8-12S	Porewater EAZ	P8-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Feb-11	D	7.2	0.61	<2.0	42.2	<0.50	2,180	0.086	293,000	<0.40	0.474	0.83	<10	<0.30	84	741,000	183	7.0	1.09	<2.0	5,800,000	<0.050	<5.0	4.67	3.02	7.3
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	28-Jan-11	---	Well Not Sampled																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Feb-11	D	<5.0	0.64	<2.0	72.2	<0.50	1,740	0.074	237,000	<0.40	0.456	1.18	<10	<0.30	73	642,000	403	10.3	1.73	<2.0	4,570,000	<0.050	<5.0	6.48	2.81	411
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Apr-11	---	Well Not Sampled																								
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	D	<5.0	<0.50	<2.0	58.4	<0.50	580	0.056	100,000	<0.10	1.27	0.69	<10	<0.30	22	224,000	446	2.5	2.08	<2.0	1,560,000	0.087	<5.0	4.97	2.78	3.3
P9-3-W #	Porewater EAZ	P9-3	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	20-Apr-11	D	8.9	<0.50	<2.0	90	<0.50	610	0.808	168,000	<0.50	4.53	1.17	<10	<0.30	40	180,000	5,090	4.1	5.08	<2.0	1,540,000	0.153	<5.0	2.09	1.06	10.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Apr-11	D	5.9	0.53	<2.0	30.7	<0.50	<10	<0.050	30,300	<0.50	0.29	0.64	<30	<0.30	22	8,060	257	10.8	1.77	<2.0	119,000	<0.050	<5.0	2.1	<0.50	<4.0 U
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Apr-11	D	<5.0	<0.50	<2.0	81.9	<0.50	<10	<0.050	99,100	<0.50	2.05	<0.50	1,400	<0.30	<20	28,900	922	<2.0	2.1	<2.0	31,400	<0.050	<5.0	0.427	<0.50	<3.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	D	<5.0	<0.50	<2.0	79.8	<0.50	<10	<0.050	88,500	<0.50	1.82	<0.50	90	<0.30	<20	24,000	723	<2.0	2.45	<2.0	31,700	<0.050	<5.0	0.659	<0.50	<3.0
P10-3S	Porewater EAZ	P10-3	NA	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Feb-11	D	25.8	<0.50	<2.0	415	<0.50	410	1.53	64,100	<0.50	15.6	1.79	17	<0.30	<20	103,000	1,170	<20	48.9	<2.0	882,000	0.354	<5.0	0.074	<0.50	27.2
P10-3I	Porewater EAZ	P10-3	NA	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Feb-11	D	<5.0	<0.50	<2.0	180	<0.50	490	1.31	255,000	<0.50	48.4	0.83	109	<0.30	<20	260,000	18,500	<20	63.6	<2.0	1,640,000	0.196	<5.0	0.07	<0.50	29.5
P10-3D	Porewater	P10-3	NA	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Feb-11	D	<5.0	<0.50	<2.0	197	<0.50	200	2.37	214,000	<0.50	35.3	1.08	<10	<0.30	<20	118,000	7,950	<20	82.4	<2.0	574,000	0.194	<5.0	0.156	<0.50	21.1
Culvert Runoff Area																																				
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	11-Feb-11	D	29.6	0.488	1.52	50.7	<0.0050	199	0.028	42,800	<0.50	1.18	0.64	44	<0.050	9.48	34,100	477	5.4	3.34	<0.50	352,000	0.0567	1.66	2.58	3.9	16.7
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	25-Jan-11	T	475	0.78	3	19.1	<0.50	670	<0.10	46,300	1.19	2.44	3.3	694	0.9	<20	57,000	1,890	125	<3.0 U	<2.0	584,000	0.087	14.8	1.71	4.79	4.7
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	28-Jan-11	D	9.6	<0.50	<2.0	7.7	<0.50	470	<0.050	43,000	<0.10	0.33	1.34	<10	<0.30	<20	69,000	77.1	4.4	0.69	<2.0	633,000	0.058	<5.0	0.749	1.89	<3.0
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Jun-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	11-Feb-11	D	7.8	0.482	1.88	48.6	<0.0050	182	<0.010	45,400	<0.50	3.19	0.58	<30	<0.050	7.6	40,300	1,050	4.52	4.88	<0.50	302,000	0.0058	0.37	0.755	0.468	9.1
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	11-Feb-11	D	<6.0	0.226	1.67	6.83	<0.010	486	<0.010	46,800	<1.0	0.23	1.9	<30	<0.10	24.1	85,000	8.27	14.3	0.9	<0.50	878,000	0.0134	<0.40	2.48	1.37	29.5
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	20-Apr-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Feb-11	D	<5.0	<0.50	<2.0	14.4	<0.50	380	<0.050	50,400	<0.40	0.609	0.91	<10	<0.30	22	101,000	150	36.4	1.18	<2.0	966,000	<0.050	<5.0	3.85	1.00	4.6
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Feb-11	D	<6.0	0.18	1.21	14.8	<0.010	348	<0.020	42,300	<1.0	0.44	<1.0	<30	<0.10	19.7	76,500	262	54.4	1.14	<0.50	772,000	0.0152	<0.40	4.65	1.03	<6.0
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	20-Apr-11	D	<5.0	<0.50	<2.0	9.6	<0.50	360	<0.10	32,900	<0.50	0.574	<0.50	<10	<0.30	<20	56,400	1,170	148	1.53	<2.0	628,000	0.05	<5.0	5.27	0.95	213
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1	Colluvium	---	7-Apr-11	---	Well Not Sampled																								
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1	Colluvium	---	19-Apr-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	19-Apr-11	D	52.2	0.7	<2.0	12.3	<0.50	140	0.093	7,820	<0.50	0.215	1.06	24	<0.30	<20	3,400	64.4	9.5	2.26	<2.0	112,000	<0.050	<5.0	0.805	1.38	<3.0
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	D	9.0	<0.50	<2.0	24	<0.50	350	0.051	35,100	<0.50	0.215	<0.50	<10	<0.30	<20	66,300	185	3.6	0.65	<2.0	547,000	<0.050	<5.0	0.279	<0.50	<3.0
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	19-Apr-11	D	24.5	1.07	<2.0	21.3	<0.50	<10	0.638	17,000	<0.50	0.331	3.45	<10	<0.30	<20	4,060	103	2.6	2.7	<2.0	38,100	<0.050	<5.0	0.303	0.54	6.8
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-11	---	Well Not Sampled																								
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	D	<5.0	<0.50	<2.0	52.8	<0.50	580	0.054	75,300	<0.50	0.41	<0.50	74	<0.30	25	134,000	179	7.5	2.05	<2.0	1,090,000	<0.050	<5.0	0.61	1.03	4.5
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	20-Apr-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	20-Apr-11	---	Well Not Sampled																								
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	14-Jun-11	---	Well Not Sampled																								
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	D	14.9	<0.50	<2.0	19	<0.50	190	<0.050	21,100	<0.50	0.157	<0.50	<10	<0.30	<20	21,000	152	7.5	0.63	<2.0	202,000	<0.050	<5.0	0.229	1.92	<3.0
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	20-Apr-11	---	Well Not Sampled																								
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Apr-11	D	84.2	0.67	<2.0	16.8	<0.50	130	<0.050	5,740	<0.50	0.083	1.15	43	<0.30	<20	4,220	31.4	5.5	<0.50	<2.0	110,000	<0.050	<5.0	0.737	3.32	<3.0
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	D	13.2	0.79	<2.0	49.8	<0.50	<10	<0.050	25,300	<0.50	0.664	<0.50	11	<0.30	<20	17,600	310	15.8	2.51	<2.0	132,000	<0.050	<5.0	0.464	0.87	<3.0
Reference Area																																				
Pr-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Apr-11	D	12.6	<0.50	<2.0	48.5	<0.50	<10	<0.050	24,400	<0.50	0.991	<1.0 U	<10	<0.30	<20	12,200	541	9.6	2.82	<2.0	194,000	0.077	<5.0	0.349	0.94	<3.0
Pr-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Apr-11	D	<5.0	<0.50	<2.0	109	<0.50	<10	<0.050	74,000	<0.50	12.7	<0.50	2,390	<0.30	<20	21,100	1,500	<2.0	12.8	<2.0	31,500	<0.050	<5.0	0.351	<0.50	6.6
Pr-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Apr-11	D	<5.0	<0.50	<2.0	128	<0.50	110	0.23	64,900	<0.50	18.1	<1.0 U	13	<0.30	<20	25,800	3,650	<2.0	18.8	<2.0	115,000	0.053	<5.0	0.248	<0.50	8.4
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	20-Apr-11	---	Well Not Sampled																								
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1	Weathered Colluvium	---	10-May-11	---	Well Not Sampled																								
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	20-Apr-11	D	9.4	<0.50	<2.0	12.6	<0.50	<10	<0.050	21,200	<0.50	0.138	0.7	<10	<0.30	<20	4,430	144	7.2	0.7	<2.0	29,500	<0.050	<5.0	0.119	0.54	<3.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	20-Apr-11	D	<5.0	<0.50	<2.0	99	<0.50	130	<0.050	133,000	<0.50	0.62	<0.50	<10	<0.30	<20	30,700	1,300	15.2	0.99	<2.0	198,000	<0.050	<5.0	1.38	<0.50	<3.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	D	<5.0	<0.50	<2.0	90.7	<0.50	120	<0.050	139,000	<0.50	0.359	1.26	<10	<0.30	24	32,400	1,630	12.6	<0.50	<2.0	204,000	<0.050	<5.0	0.993	<0.50	<3.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	---	Well Not Sampled																								
Seawater																																				
P3-3-O	Surface Water	P3-3	NA	WB	NA	NA	NA	---	---	9-Feb-11	D	17.4	<0.50	<2.0	8.5	<0.50	2,780	0.051	261,000	<0.40	0.058	<0.50	<10	<0.30	118	823,000	31.6	7.1	0.79	<2.0	7,160,000	<0.050	<5.0	2.02	1.11	6.6
P3-3-O	Surface Water	P3-3	NA	WB	NA	NA	NA	---	---	4-Jul-11	D	19.2	<0.50	<2.0	8.2	<0.50	2,720	0.122	209,000	<0.50	<0.050	0.80	<10	<0.30	98	663,000	3.54	5.9	<0.50	<2.0	5,650,000	<0.050	<5.0	1.63	1.01	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	NA	NA	NA	---	---	4-Jul-11	T	35.5	<0.50	<2.0	8.1	<0.50	2,440	0.052	201,000	<0.50 U	<0.050	1.72	32	<0.30	91	626,000	5.86	5.7	0.98	<2.0	5,260,000	0.079	<5.0	1.59	1.15	4.8
P3-3-O	Surface Water	P3-3	NA	WB	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P3-12-O	Surface Water	P3-12	NA	WB	NA	NA	NA	---	---	10-Feb-11	D	18.8	<0.50	<2.0	8.2	<0.50	2,940	<0.050	246,000	<0.20	<0.050	<0.50	<10	<0.30	120	803,000	3.59	6.8	<0.50	<2.0	6,880,000	<0.050	<5.0	1.97	1.11	5.2
P6-3-O	Surface Water	P6-3	NA	EB	NA	NA	NA	---	---	27-Jan-11	D	16.5	<0.50	<2.0	9.4	<0.50	2,890	<0.20 U	251,000	0.22	0.091	0.74	<10	<0.30	121	827,000	68	7.1	<0.50	<2.0	7,060,000	<0.050	<5.0	2.01	0.92	5.4
P6-3-O	Surface Water	P6-3	NA	EB	NA	NA	NA	---	---	9-Feb-11	---	Well Not Sampled																								
P6-3-O	Surface Water	P6-3	NA	EB	NA	NA	NA	---	---	4-Jul-11	D	18.0	<0.50	<2.0	8.3	<0.50	2,810	0.147	208,000	<0.50	<0.050	0.65	<10	<0.30	102	662,000	3.46	<0.50	3.23	<2.0	5,590,000	<0.050	<5.0	1.66	1.03	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	NA	NA	NA	---	---	4-Jul-11	T	49.6	<0.50	<2.0	8.4	<0.50	2,460	0.071	214,000	<0.50 U	<0.050	1.04	51	<0.30	88	672,000	5.48	5.5	0.76	<2.0	5,620,000	0.051	<5.0	1.60	1.17	3.3
P6-3-O	Surface Water	P6-3	NA	EB	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P6-12-O	Surface Water	P6-12	NA	EB	NA	NA	NA	---	---	8-Feb-11	D	21.0	<0.50	<2.0	8.1	<0.50	2,840	<0.050	259,000	<0.40	<0.050	1.01	<10	<0.30	118	825,000	7.81	7.1	<0.50	<2.0	7,250,000	<0.050	<5.0	2.02	1.18	3.5
P6-12-O	Surface Water	P6-12	NA	EB	NA	NA	NA	---	---	4-Jul-11	D	24.0	<0.50	<2.0	7.7	<0.50	2,520	<0.050	195,000	<0.50	<0.050	<0.50	<10	0.33	91	622,000	2.66	5.4	0.56	<2.0	5,270,000	<0.050	<5.0	1.47	0.95	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	NA	NA	NA	---	---	4-Jul-11	T	34.2	<0.50	<2.0	7.9	<0.50	2,370	<0.050	184,000	<0.50 U	<0.050	0.73	21	<0.30	84	570,000	3.53	5.4	<0.50	<2.0	4,840,000	0.051	<5.0	1.49	1.01	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-3-O	Surface Water	P8-3	NA	EB	NA	NA	NA	---	---	27-Jan-11	D	15.6	<0.50	<2.0	8.4	<0.50	3,020	<0.20 U	269,000	<0.40	<0.050	0.52	<10	<0.30	127	865,000	4.46	6.9	<0.50	<2.0	7,540,000	<0.050	<5.0	2.05	1.09	3.5
P8-3-O	Surface Water	P8-3	NA	EB	NA	NA	NA	---	---	9-Feb-11	---	Well Not Sampled																								
P8-3-O	Surface Water	P8-3	NA	EB	NA	NA	NA	---	---	4-Jul-11	D	17.4	<0.50	<2.0	7.9	<0.50	2,800	0.140	218,000	<0.50	<0.050	0.60	<10	<0.30	101	668,000	3.17	6.0	<0.50	<2.0	5,900,000	<0.050	<5.0	1.58	0.98	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	NA	NA	NA	---	---	4-Jul-11	T	26.1	<0.50	<2.0	8.4	<0.50	2,530	0.059	209,000	<0.50 U	<0.050	0.68	20	<0.30	92	655,000	4.02	5.7	0.53	<2.0	5,470,000	0.051	<5.0	1.61	1.14	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P8-12-O	Surface Water	P8-12	NA	EB	NA	NA	NA	---	---	8-Feb-11	D	18.1	<0.50	<2.0	8.2	<0.50	3,010	<0.050	306,000	<0.40	<0.050	0.62	<10	<0.30	124	927,000	3.19	7.7	<0.50	<2.0	8,200,000	<0.050	<5.0	2.14	1.24	5.0
P14-3-O	Surface Water	P14-3	NA	CL	NA	NA	NA	---	---	27-Jan-11	D	15.9	<0.50	<2.0	9.4	<0.50	3,250	<0.050	244,000	<0.20	<0.050	0.68	<10	<0.30	117	782,000	4.53	6.7	<0.50	<2.0	7,030,000	<0.050	<5.0	1.91	1.09	<3.0
P14-12-O	Surface Water	P14-12	NA	CL	NA	NA	NA	---	---	7-Feb-11	D	13.0	<0.50	<2.0	8.8	<0.50	3,240	0.072	304,000	<0.40	<0.050	0.60	<10	<0.30	134	903,000	1.95	8.1	0.64	<2.0	7,930,000	<0.050	<5.0	2.25	1.17	3.1
PR-2S	Surface Water	PR2	NA	RL	NA	NA	NA	---	---	8-Apr-11	D	15.9	<0.50	<2.0	9	<0.50	2,570	0.137	233,000	<0.50	<0.050	<0.90 U	<10	<0.30	96	741,000	2.7	6.1	<0.50	<2.0	6,250,000	<0.050	<5.0	1.82	1.08	3.7
PR-S-W	Surface Water	PEC	NA	RL	NA	NA	NA	---	---	7-Apr-11	D	13.8	<0.50	<2.0	7.7	<0.50	2,630	<0.050	264,000	<0.50	<0.050	0.73	---	<0.30	96	828,000	3.93	6.1	<0.50	<2.0	7,230,000	<0.050	<5.0	1.89	1.01	<3.0
PEC-3-O	Surface Water	PEC-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	D	19.7	<0.50	<2.0	8.1	<0.50	2,710	0.242	196,000	<0.50	<0.050	0.94	<10	<0.30	96	623,000	2.80	5.8	<0.50	<2.0	5,330,000	<0.050	<5.0	1.52	0.94	3.9
PEC-3-O	Surface Water	PEC-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	T	28.8	<0.50	<2.0	8.0	<0.50	2,410	0.175	197,000	<0.50 U	<0.050	1.00	19	<0.30	87	616,000	3.66	5.4	0.58	<2.0	5,170,000	<0.050	<5.0	1.55	1.07	4.2
PEC-3-O	Surface Water	PEC-3	NA	RL	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEC-12-O	Surface Water	PEC-12	NA	RL	NA	NA	NA	---	---	4-Jul-11	D	21.8	<0.50	<2.0	7.6	<0.50	2,470	0.145	179,000	<0.50	<0.050	0.89	<10	<0.30	90	568,000	2.86	5.3	<0.50	<2.0	4,850,000	<0.050	<5.0	1.39	0.98	<3.0
PEC-12-O	Surface Water	PEC-12	NA	RL	NA	NA	NA	---	---	4-Jul-11	T	99.9	<0.50	<2.0	7.8	<0.50	2,200	<0.050	180,000	<0.50 U	0.060	1.30	93	0.33	79	557,000	6.34	4.9	0.61	<2.0	4,690,000	<0.050	<5.0	1.39	1.10	<3.0
PEC-12-O	Surface Water	PEC-12	NA	RL	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PR2-3-O	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	D	20.5	<0.50	<2.0	9.1	<0.50	2,770	0.131	195,000	<0.50	<0.050	0.95	<10	<0.30	101	621,000	2.86	5.9	<0.50	<2.0	5,250,000	<0.050	<5.0	1.52	1.02	3.1
PR2-3-O	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	T	29.8	<0.50	<2.0	8.3	<0.50	2,420	0.059	197,000	<0.50 U	<0.050	0.95	20	<0.30	88	619,000	3.84	5.6	0.52	<2.0	5,190,000	<0.050	<5.0	1.54	1.00	<3.0 UJ
PR2-3-O	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PR2-12-O	Surface Water	PR2-12	NA	RL	NA	NA	NA	---	---	4-Jul-11	D	23.3	<0.50	<2.0	7.8	<0.50	2,630	0.129	185,000	<0.50	<0.050	0.90	11	<0.30	93	582,000	2.44	5.4	<0.50	<2.0	5,030,000	<0.050	<5.0	1.38	0.94	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	NA	NA	NA	---	---	4-Jul-11	T	115	<0.50	<2.0	8.1	<0.50	2,300	0.072	188,000	<0.50 U	0.075	1.31	140	0.46	83	585,000	7.69	5.2	0.66	<2.0	4,910,000	<0.050	<5.0	1.48	1.22	3.5
PR2-12-O	Surface Water	PR2-12	NA	RL	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP-2 (P8-12D)	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	28-Jan-11	D	<5.0	<0.50	<2.0	51.8	<0.50	580	0.062	95,700	<0.10	1.14	0.69	<10	<0.30	22	215,000	434	2.1	1.75	<2.0	1,470,000	0.083	<5.0	4.12	3.27	<3.0
DUP-2 (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	19-Apr-11	---	Well Not Sampled																								
DUP-3 (P8-12-O)	Surface Water	P8-12	NA	EB	NA	NA	NA	---	---	8-Feb-11	D	18.6	<0.50	<2.0	8.2	<0.50	3,030	<0.050	285,000	<0.40	<0.050	0.61	<10	<0.30	123	865,000	3.25	7.5	<0.50	<2.0	7,560,000	<0.050	<5.0	2.10	1.18	4.5
DUP-3 (P14-17D)	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	19-Apr-11	D	8.2	<0.50	<2.0	25.1	<0.50	350	<0.050	35,400	<0.50	0.219	<0.50	<10	<0.30	<20	66,200	196	3.5	0.62	<2.0	558,000	<0.050	<5.0	0.276	<0.50	<3.0
DUP-4 (P6-3D) *	Porewater	P6-3	NA	EB	1.4-1.6	1.4	1.6	Weathered Colluvium	---	9-Feb-11	D	5.7	<0.50	<2.0	18.2	<0.50	<10	<0.050	46,100	<0.40	12.4	<0.50	4,180	<0.30	<20	16,200	4,720	<2.0	0.79	<2.0	14,800	<0.050	<5.0	<0.050	0.59	<3.0
DUP-4 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5	Weathered Colluvium	---	20-Apr-11	---	Well Not Sampled																								
DUP-5 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	10-May-11	D	<5.0	<0.50	2	89.9	<0.50	120	<0.050	140,000	<0.50	0.37	<0.50	<10	<0.30	23	32,200	1,590	12.5	<0.50	<2.0	205,000	<0.050	<5.0	0.99	<0.50	<3.0
DUP-6 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Jun-11	---	Well Not Sampled																								
DUP-7 (PR2-3-O)	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	D	24.0	<0.50	<2.0	8.3	<0.50	2,820	0.053	194,000	<0.50	<0.050	0.95	13	<0.30	101	619,000	2.98	6.0	0.52	<2.0	5,300,000	<0.050	<5.0	1.51	1.03	3.3
DUP-7 (PR2-3-O)	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	4-Jul-11	T	26.8	<0.50	<2.0	8.0	<0.50	2,370	0.058	195,000	<0.50	<0.050	0.80	18	<0.30	87	612,000	3.54	5.4	0.57	<2.0	5,120,000	<0.050	<5.0	1.49	1.01	3.9 J
DUP-7	Surface Water	PR2-3	NA	RL	NA	NA	NA	---	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DUP-GW1 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Apr-11	D	<5.0	<0.50	<2.0	80.2	<0.50	<10	<0.050	88,100	<0.50	1.83	<0.50	103	<0.30	<20	24,100	722	<2.0	2.38	<2.0	31,800	<0.050	<5.0	0.653	<0.50	<3.0
Travel Blank	NA	NA	NA	NA	NA	NA	NA	NA	NA	28-Jan-11	T	<3.0	<0.010	<0.050	<0.10	<0.0050	<5.0	<0.0050	<50	<0.50	<0.050	<0.50	<30	<0.050	<0.20	<10	<0.20	<0.050	<0.20	<0.20	<2,000	<0.0020	<0.20	<0.0020	<0.050	<3.0
Perimeter Monitoring (Upgradient of the Foreshore and CPR Railroad tracks)																																				
A2MW09-6S	Groundwater	A2MW09-6S	NA	NA	2.44-5.44	2.44	5.44	NA	NA	6-Jul-11	D	<20	<1.0	<2.0	83	<5.0	<100	<0.10	89,500	<1.0	2.8	<2.0	43	<2.0	<50	28,400	5,460	<2.0	<10	<2.0	44,500	<0.40	<50	0.43	<30	<5.0
A2MW09-6S	Groundwater	A2MW09-6S	NA	NA	2.44-5.44	2.44	5.44	NA	NA	6-Jul-11	T	36	<1.0	<2.0	86	<5.0	<100	<0.10	89,600	<1.0	3.0	<2.0	819	<2.0	<50	28,700	5,480	<2.0	<10	<2.0	44,900	<0.40	<50	0.44	<30	<5.0
A2MW09-6S	Groundwater	A2MW09-6S	NA	NA	2.44-5.44	2.44	5.44	NA	NA	26-Nov-12	D	<10	<0.5	2.4	28	<5	<100	<0.05	27,000	<0.5	6.06	<1	7,070	<1	---	7,870	2,740	<1	<5	<1	12,500	<0.2	<50	<0.2	<30	<5
A2MW09-6I	Groundwater	A2MW09-6I	NA	NA	9.33-10.83	9.33	10.83	NA	NA	6-Jul-11	D	<20	<1.0	<2.0	84	<5.0	<100	<0.10	85,200	<1.0	<1.0	<2.0	1,880	<2.0	<50	28,400	5,330	<2.0	<10	<2.0	32,200	<0.40	<50	<0.40	<30	<5.0
A2MW09-6I	Groundwater	A2MW09-6I	NA	NA	9.33-10.83	9.33	10.83	NA	NA	6-Jul-11	T	70	<1.0	<2.0	93	<5.0	<100	<0.10	87,300	<1.0	<1.0	<2.0	4,590	<2.0	<50	29,500	5,500	<2.0	<10	<2.0	33,300	<0.40	<50	<0.40	<30	<5.0
A2MW09-6I	Groundwater	A2MW09-6I	NA	NA	9.33-10.83	9.33	10.83	NA	NA	26-Nov-12	D	<10	<0.5	2.5	38	<5	<100	<0.05	28,100	<0.5	0.67	<1	3,640	<1	---	11,700	2,620	<1	<5	<1	16,200	<0.2	<50	<0.2	<30	<5
A2MW09-6I	Groundwater	A2MW09-6I	NA	NA	9.33-10.83	9.33	10.83	NA	NA	5-Feb-13	D	<10	<0.5	1.5	4.6	<5	<100	<0.05	36,100	<0.5	<0.5	<1	4,550	<1	---	14,300	2,800	<1	<5	<1	21,900	<0.2	<50	<0.2	<30	<5
A2MW09-12	Groundwater	A2MW09-12	NA	NA	2.22-5.22	2.22	5.22	NA	NA	8-Jul-11	D	<10	<0.50	<1.0	26	<5.0	<100	0.085	11,500	<0.50	11.0	1.5	<30	<1.0	<50	4,180	1,100	<1.0	<5.0	<1.0	31,300	<0.20	<50	<0.20	<30	<5.0
A2MW09-12	Groundwater	A2MW09-12	NA	NA	2.22-5.22	2.22	5.22	NA	NA	8-Jul-11	T	2,350	<0.50	<1.0	37	<5.0	<100	0.083	12,000	3.63	12.3	4.2	2,460	<1.0	<50	4,920	1,180	1.1	<5.0	<1.0	31,900	<0.20	86	<0.20	<30	8.6
A2MW09-12	Groundwater	A2MW09-12	NA	NA	2.22-5.22	2.22	5.22	NA	NA	26-Nov-12	D	16	<0.5	<1	<20	<5	<100	<0.05	5,650	<0.5	<0.5	1	<30	<1	---	1,650	139	<1	<5	<1	14,600	<0.2	<50	<0.2	<30	<5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
A2MW09-12	Groundwater	A2MW09-12	NA	NA	2.22-5.22	2.22	5.22	NA	NA	4-Feb-13	D	<10	<0.5	<1	<20	<5	<100	<0.05	5,150	<0.5	<0.5	<1	<30	<1	---	1,740	121	<1	<5	<1	12,400	<0.2	<50	<0.2	<30	<5
A2MW09-13	Groundwater	A2MW09-13	NA	NA	2.02-5.02	2.02	5.02	NA	NA	8-Jul-11	D	76	<1.0	<2.0	34	<5.0	<100	<0.10	6,920	<1.0	4.2	4.3	62	<2.0	<50	1,730	675	2.6	<10	<2.0	57,300	<0.40	<50	<0.40	<30	<5.0
A2MW09-13	Groundwater	A2MW09-13	NA	NA	2.02-5.02	2.02	5.02	NA	NA	8-Jul-11	T	18,300	<1.0	3.8	149	<5.0	<100	0.11	8,870	30.2	9.4	21.8	15,200	4.6	<50	5,870	894	3.8	10	<2.0	51,200	<0.40	578	<0.40	45	35.9
A2MW09-13	Groundwater	A2MW09-13	NA	NA	2.02-5.02	2.02	5.02	NA	NA	26-Nov-12	D	34	<0.5	<1	<20	<5	<100	<0.05	3,880	<0.5	<0.5	1.6	48	<1	---	670	29	<1	<5	<1	17,500	<0.2	<50	<0.2	<30	<5
A2MW09-13	Groundwater	A2MW09-13	NA	NA	2.02-5.02	2.02	5.02	NA	NA	4-Feb-13	D	28	<0.5	<1	<20	<5	<100	0.064	3,410	<0.5	1.81	4.6	33	<1	---	730	224	<1	<5	<1	20,000	<0.2	<50	<0.2	<30	<5
A2MW09-14	Groundwater	A2MW09-14	NA	NA	2.03-5.03	2.03	5.03	NA	NA	7-Jul-11	D	<10	<0.50	3.2	29	<5.0	<100	<0.050	31,600	<0.50	0.95	<1.0	16,500	<1.0	<50	6,200	3,590	<1.0	<5.0	<1.0	34,000	<0.20	<50	<0.20	<30	<5.0
A2MW09-14	Groundwater	A2MW09-14	NA	NA	2.03-5.03	2.03	5.03	NA	NA	7-Jul-11	T	254	<0.50	5.8	47	<5.0	<100	<0.050	32,200	0.55	1.09	<1.0	25,400	<1.0	<50	6,310	3,660	<1.0	<5.0	<1.0	34,100	<0.20	<50	<0.20	<30	<5.0
A2MW09-14	Groundwater	A2MW09-14	NA	NA	2.03-5.03	2.03	5.03	NA	NA	26-Nov-12	D	14,800	<2.5	<5	106	<5	<100	2.47	259,000	<0.5	275	27.8	134,000	<5	---	51,600	30,400	<5	71	<5	69,800	<1	<50	<1	<30	121
A2MW09-15	Groundwater	A2MW09-15	NA	NA	1.35-4.35	1.35	4.35	NA	NA	7-Jul-11	D	<20	<1.0	5.9	<20	<5.0	<100	<0.10	20,900	<1.0	1.3	<2.0	951	<2.0	<50	6,380	1,160	11.5	<10	<2.0	151,000	<0.40	<50	<0.40	<30	<5.0
A2MW09-15	Groundwater	A2MW09-15	NA	NA	1.35-4.35	1.35	4.35	NA	NA	7-Jul-11	T	114	<1.0	6.3	21	<5.0	<100	<0.10	21,800	<1.0	1.4	<2.0	2,470	<2.0	<50	6,510	1,240	12.2	<10	<2.0	154,000	<0.40	<50	<0.40	<30	<5.0
A2MW09-15	Groundwater	A2MW09-15	NA	NA	1.35-4.35	1.35	4.35	NA	NA	26-Nov-12	D	19,600	<0.5	<1	25	<5	<100	0.409	47,300	<0.5	27.1	8.7	19,400	<1	---	14,900	4,750	<1	61.6	<1	88,800	<0.2	<50	<0.2	<30	32
A2MW09-15	Groundwater	A2MW09-15	NA	NA	1.35-4.35	1.35	4.35	NA	NA	4-Feb-13	D	18,000	<0.5	<1	22	<5	<100	0.578	35,800	<0.5	19.8	7.4	3,340	<1	---	11,900	6,230	<1	46.7	<1	70,600	<0.2	<50	<0.2	<30	21.6
MW02-02	Groundwater	MW02-02	NA	NA	1.2-4.3	1.2	4.3	NA	NA	7-Jul-11	D	1,360	<2.5	13.7	60	<5.0	<100	<0.25	3,280	<2.5	3.9	7.8	2,230	<5.0	<50	660	249	6.3	<25	<5.0	218,000	<1.0	411	<1.0	40	<5.0
MW02-02	Groundwater	MW02-02	NA	NA	1.2-4.3	1.2	4.3	NA	NA	8-Jul-11	T	2,070	<2.5	15.7	77	<5.0	<100	<0.25	3,470	3.2	5.1	9.9	3,060	<5.0	<50	670	233	6.6	<25	<5.0	230,000	<1.0	559	<1.0	45	<5.0
MW02-02	Groundwater	MW02-02	NA	NA	1.2-4.3	1.2	4.3	NA	NA	27-Nov-12	D	<50	<2.5	<5	<20	<5	<100	<0.25	12,900	<0.5	<2.5	<5	406	<5	---	3,670	860	20.2	<25	<5	615,000	<1	<50	<1	<30	8.5
MW02-02	Groundwater	MW02-02	NA	NA	1.2-4.3	1.2	4.3	NA	NA	4-Feb-13	D	39	<0.5	9.2	<20	<5	<100	0.059	5,820	<0.5	0.71	<1	1,090	<1	---	1,830	481	9.6	<5	<1	356,000	<0.2	<50	<0.2	<30	<5
MW02-03	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	D	18	<0.50	4.7	<20	<5.0	<100	<0.050	10,900	<0.50	2.56	<1.0	6,830	<1.0	<50	2,830	1,150	<1.0	<5.0	<1.0	22,000	<0.20	<50	<0.20	<30	<5.0
MW02-03	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	T	2,760	<0.50	5.8	35	<5.0	<100	<0.050	11,300	3.84	3.9	3.9	10,700	<1.0	<50	3,610	1,180	<1.0	<5.0	<1.0	21,700	<0.20	123	<0.20	<30	8.9
MW02-03	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	27-Nov-12	D	19	<0.5	6	131	<5	<100	<0.05	82,600	<0.5	16.5	<1	58,700	<1	---	21,000	8,040	<1	<5	<1	44,600	<0.2	<50	<0.2	<30	<5
MW02-03	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	4-Feb-13	D	24	<0.5	5.3	95	<5	<100	<0.05	65,500	<0.5	14	<1	42,900	<1	---	16,100	6,260	<1	<5	<1	38,600	<0.2	<50	<0.2	<30	<5
MW02-04	Groundwater	MW02-04	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	D	<50	<2.5	<5.0	47	<5.0	<100	<0.25	268,000	<2.5	13	<5.0	99	<5.0	<50	87,700	7,370	<5.0	<25	<5.0	83,700	<1.0	<50	<1.0	<30	<5.0
MW02-04	Groundwater	MW02-04	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	T	2,400	<2.5	<5.0	56	<5.0	<100	1.07	262,000	2.9	15.0	10.1	2,880	<5.0	<50	87,200	7,220	<5.0	<25	<5.0	80,800	<1.0	103	1.0	<30	13.1
MW02-04	Groundwater	MW02-04	NA	NA	1.5-4.6	1.5	4.6	NA	NA	27-Nov-12	D	<10	<0.5	<1	<20	<5	<100	0.255	35,400	<2.5	2.17	1.8	66	<1	---	11,300	461	<1	<5	<1	27,200	<0.2	<50	<0.2	<30	6
MW02-04	Groundwater	MW02-04	NA	NA	1.5-4.6	1.5	4.6	NA	NA	4-Feb-13	D	<10	<0.5	<1	29	<5	<100	0.63	49,400	<0.5	16.9	1.9	<30	<1	---	15,200	1,590	<1	6.5	<1	27,500	<0.2	<50	<0.2	<30	5.9
MW03-02	Groundwater	MW03-02	NA	NA	3.7-7.6	3.7	7.6	NA	NA	7-Jul-11	D	<10	<0.50	1.3	25	<5.0	<100	<0.050	16,800	<0.50	8.00	2.0	117	<1.0	<50	4,850	1,230	<1.0	<5.0	<1.0	54,400	<0.20	<50	<0.20	<30	<5.0
MW03-02	Groundwater	MW03-02	NA	NA	3.7-7.6	3.7	7.6	NA	NA	7-Jul-11	T	17	<0.50	1.2	23	<5.0	<100	0.086	16,800	<0.50	7.96	2.9	207	<1.0	<50	4,870	1,230	<1.0	<5.0	<1.0	54,700	<0.20	<50	<0.20	<30	<5.0
MW03-02	Groundwater	MW03-02	NA	NA	3.7-7.6	3.7	7.6	NA	NA	26-Nov-12	D	<10	<0.5	<1	<20	<5	<100	<0.05	5,570	<0.5	<0.5	1.9	<30	<1	---	1,450	150	<1	<5	<1	19,900	<0.2	<50	<0.2	<30	<5
MW03-02	Groundwater	MW03-02	NA	NA	3.7-7.6	3.7	7.6	NA	NA	4-Feb-13	D	<10	<0.5	<1	<20	<5	<100	0.05	8,820	<0.5	<0.5	2.5	<30	<1	---	2,540	159	<1	<5	<1	30,400	<0.2	<50	<0.2	<30	<5
MW03-03	Groundwater	MW03-03	NA	NA	6.1-13.7	6.1	13.7	NA	NA	7-Jul-11	D	<10	<0.50	4.3	34	<5.0	<100	<0.050	30,400	<0.50	1.51	<1.0	6,690	<1.0	<50	6,240	2,550	<1.0	<5.0	<1.0	16,100	<0.20	<50	<0.20	<30	<5.0
MW03-03	Groundwater	MW03-03	NA	NA	6.1-13.7	6.1	13.7	NA	NA	7-Jul-11	T	5,350	<0.50	7.3	90	<5.0	<100	1.17	30,700	4.71	4.68	33.7	17,300	5.7	<50	8,020	2,590	1.6	<5.0	<1.0	15,700	<0.20	196	0.5	38	37.1
MW03-03	Groundwater	MW03-03	NA	NA	6.1-13.7	6.1	13.7	NA	NA	28-Nov-12	D	<10	<0.5	7.2	130	<5	<100	<0.05	40,800	<0.5	2.46	<1	12,600	<1	---	9,980	3,110	<1	48.6	<1	19,500	<0.2	<50	<0.2	<30	<5
MW09-05I	Groundwater	A2MW09-05I	NA	NA	9.18-10.68	9.18	10.68	NA	NA	6-Jul-11	D	<10	<0.50	<1.0	38	<5.0	<100	<0.050	79,700	<0.50	<0.50	<1.0	741	<1.0	<50	25,500	1,050	<1.0	<5.0	<1.0	15,000	<0.20	<50	<0.20	<30	<5.0
MW09-05I	Groundwater	A2MW09-05I	NA	NA	9.18-10.68	9.18	10.68	NA	NA	6-Jul-11	T	168	<0.50	<1.0	42	<5.0	<100	<0.050	82,800	<0.50	<0.50	<1.0	1,980	<1.0	<50	26,700	1,130	<1.0	<5.0	<1.0	15,900	<0.20	<50	<0.20	<30	<5.0
MW09-05I	Groundwater	A2MW09-05I	NA	NA	9.18-10.68	9.18	10.68	NA	NA	26-Nov-12	D	<10	<0.5	<1	37	<5	<100	<0.05	57,100	<0.5	<0.5	<1	3,250	<1	---	19,400	1,460	<1	<5	<1	13,600	<0.2	<50	<0.2	<30	<5
MW09-05I	Groundwater	A2MW09-05I	NA	NA	9.18-10.68	9.18	10.68	NA	NA	5-Feb-13	D	<10	<0.5	<1	34	<5	<100	<0.05	52,600	<0.5	<0.5	<1	3,600	<1	---	17,000	1,670	<1	<5	<1	14,200	<0.2	<50	<0.2	<30	<5
U8	Groundwater	U8	NA	NA	3.22-6.22	3.22	6.22	NA	NA	6-Jul-11	D	<10	<0.50	2.2	66	<5.0	<100	<0.050	28,100	<0.50	6.32	<1.0	4,440	<1.0	<50	6,630	2,150	<1.0	5.2	<1.0	7,700	<0.20	<50	<0.20	<30	<5.0
U8	Groundwater	U8	NA	NA	3.22-6.22	3.22	6.22	NA	NA	6-Jul-11	T	135	<0.50	2.4	69	<5.0	<100	<0.050	28,700	<0.50	6.31	1.1	5,450	<1.0	<50	6,780	2,210	<1.0	5.3	<1.0	7,900	<0.20	<50	<0.20	<30	<5.0
U8	Groundwater	U8	NA	NA	3.22-6.22	3.22	6.22	NA	NA	26-Nov-12	D	74	<0.5	1.9	56	<5	<100	<0.05	12,300	<0.5	6.22	1.3	2,090	<1	---	2,060	1,220	<1	<5	<1	10,700	<0.2	<50	<0.2	<30	<5
U8	Groundwater	U8	NA	NA	3.22-6.22	3.22	6.22	NA	NA	5-Feb-13	D	40	<0.5	<1	51	<5	<100	0.076	8,570	<0.5	1.61	1.3	169	<1	---	1,760	245	<1	<5	<1	7,000	<0.2	<50	<0.2	<30	<5
U9	Groundwater	U9	NA	NA	3.3-6.3	3.3	6.3	NA	NA	6-Jul-11	D	<10	<0.50	1.4	70	<5.0	<100	<0.050	20,000	<0.50	7.79	<1.0	20,200	<1.0	<50	4,930	1,980	<1.0	<5.0	<1.0	9,300	<0.20	<50	<0.20	<30	6.1
U9	Groundwater	U9	NA	NA	3.3-6.3	3.3	6.3	NA	NA	6-Jul-11	T	488	<0.50	1.9	77	<5.0	<100	0.059	20,700	<0.50	8.27	2.5	24,400	<1.0	<50	5,150	2,030	<1.0	<5.0	<1.0	9,800	<0.20	<50	<0.20	<30	11.4
U9	Groundwater	U9	NA	NA	3.3-6.3	3.3	6.3	NA	NA	26-Nov-12	D	30	<0.5	<1	43	<5	<100	<0.05	7,650	<0.5	2.42	<1	4,430	<1	---	1,230	511	<1	<5	<1	6,600	<0.2	<50	<0.2	<30	<5
U9	Groundwater	U9	NA	NA	3.3-6.3	3.3	6.3	NA	NA	5-Feb-13	D	29	<0.5	<1	43	<5	<100	<0.05	9,180	<0.5	3.52	<1	6,170	<1	---	1,860	764	<1	<5	<1	5,000	<0.2	<50	<0.2	<30	6.8
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP1 (MW02-03)	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	D	20	<0.50	4.4	<20	<5.0	<100	<0.050	10,900	<0.50	2.56	<1.0	6,770	<1.0	<50	2,810	1,140	<1.0	<5.0	<1.0	21,700	<0.20	<50	<0.20	<30	<5.0
DUP1 (MW02-03)	Groundwater	MW02-03	NA	NA	1.5-4.6	1.5	4.6	NA	NA	7-Jul-11	T	3,170	<0.50	6.0	37	<5.0	<100	<0.050	11,400	3.74	3.97	4.4	11,300	<1.0	<50	3,840	1,210	<1.0	<5.0	<1.0	22,300	<0.20	146	<0.20	<30	9.7
Monitoring Samples																																				
Western IRA Barrier																																				
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Dec-11	D	5.1	<0.50	<2.0	45.8	<0.50	1,980	0.197	214,000	<0.50	0.475	1.15	<10	<0.30	78	594,000	23	5.4	33	<2.0	4,930,000	<0.050	<5.0	2.8	<0.50	147
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	D	6.0	<0.50	<2.0	35.0	<0.50	2,510	<0.050	201,000	<0.50	0.060	0.63	15	<0.30	91	474,000	2.64	4.6	0.72	<2.0	3,950,000	<0.050	<5.0	1.54	<0.50	9.5
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	D	<5.0	<0.50	<2.0	12.0	<0.50	1,390	<0.050	102,000	<0.50	0.149	0.50	16	<0.30	47	269,000	1.52	3.6	<0.50	<2.0	2,570,000	<0.050	<5.0	0.875	<0.50	11.8
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-13	D	6.8	0.132	0.60	2.14	<0.010	664	0.053	15,700	<1.0	<0.10	1.71	<30	<0.10	21.7	37,100	0.52	4.35	<0.40	<0.40	593,000	<0.0040	<0.40	0.460	0.75	4.9
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-13	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Dec-13	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Mar-14	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Sep-14	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	D	<5.0	<0.50	<2.0	49.7	<0.50	2,150	0.143	306,000	<0.50	<0.050	2.13	<10	<0.30	69	732,000	1.56	2.7	0.97	<2.0	5,720,000	<0.050	<5.0	0.797	<0.50	13.0
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	13-Mar-15	T	Insufficient water of analysis																								
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	18-Jun-15	D	<5.0	<0.50	<2.0	42.5	<0.50	2,450	0.157	301,000	<0.50	<0.050	1.74	<10	<0.30	73	802,000	0.67	3.4	0.78	<2.0	5,920,000	<0.050	<5.0	1.41	0.53	6.9
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	18-Jun-15	T	182	<0.50	<2.0	42.9	<0.50	2,400	0.135	292,000	8.72	0.149	7.14	387	0.40	70.0	778,000	6.30	3.2	0.98	<2.0	5,930,000	<0.050	9.0	1.23	1.00	8.2
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	9-Sep-15	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	8-Dec-15	D	2.6	0.227	0.45	2.70	<0.010	672	<0.010	17,500	<1.0	<0.10	2.09	<30	<0.10	16.7	47,000	<0.40	5.66	<0.40	<0.40	813,000	<0.0040	<0.40	0.236	0.63	7.9
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	8-Dec-15	T	16.2	0.239	0.44	2.50	<0.010	693	<0.010	16,500	3.4	<0.10	2.6	48	0.11	16.6	45,200	0.63	5.94	<0.40	<0.40	788,000	<0.010	0.88	0.248	0.69	<6.0
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	2-Mar-16	D	<5.0	<0.50	<2.0	18.2	<0.50	1,880	0.170	207,000	<0.50	<0.050	0.79	<10	<0.30	59	519,000	0.86	6.9	<0.50	<2.0	4,000,000	0.065	<5.0	1.7	0.76	5.4
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	2-Mar-16	T	788	<0.50	<2.0	20.2	<0.50	1,810	0.211	215,000	1.87	0.510	2.28	855	0.97	63	542,000	63.8	6.4	1.48	<2.0	4,170,000	0.075	26.9	1.82	2.49	8.1
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	17-May-16	D	<5.0	<0.50	<2.0	48.3	<0.50	2,280	0.215	265,000	<0.50	<0.050	2.28	<10	<0.30	84	723,000	0.90	3.2	1.02	<2.0	5,680,000	<0.050	<5.0	0.790	<0.50	31.5
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	17-May-16	T	45.1	<0.50	<2.0	51.5	<0.50	2,620	0.242	290,000	2.06	0.067	2.62	69	<0.30	91	760,000	2.25	3.2	1.18	<2.0	5,980,000	<0.050	<5.0	0.775	0.56	8.4
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	16-Aug-16	---	Well Not Sampled - Dry																								
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	22-Nov-16	D	<5.0	<0.50	<2.0	27.6	<0.50	1,960	0.088	187,000	<0.50	<0.050	1.36	<10	<0.30	72	514,000	0.52	2.9	<0.50	<2.0	4,210,000	<0.050	<5.0	0.636	<0.50	6.1
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	22-Nov-16	T	83.6	<0.50	<2.0	27.5	<0.50	1,890	0.106	192,000	2.97	0.054	2.89	149	<0.30	70.0	506,000	3.98	2.8	0.69	<2.0	4,210,000	<0.050	<5.0	0.666	<0.50	9.1
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	13-Mar-17	D	<5.0	<0.50	<2.0	15.5	<0.50	1,210	<0.050	88,100	<0.50	<0.050	1.11	<10	<0.30	48	263,000	0.23	3.9	<0.50	<2.0	2,540,000	<0.050	<5.0	0.373	<0.50	4
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	---	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	13-Mar-17	T	52.3	<0.50	<2.0	11.7	<0.50	1,280	<0.050	84,500	5.41	<0.050	3.50	103	<0.30	48	252,000	1.81	4	<0.50	<2.0	2,460,000	<0.050	<5.0	0.435	<0.50	4.2
P2.5-7S	Porewater EAZ	P2.5-8	CS	WB	0.2-0.5	0.2	0.4	Beach sand	---	5-Jun-17	---	Well Not Sampled - Dry																								
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Oct-11	---	Well Not Sampled																								
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-11	D	<5.0	<0.50	<2.0	177	<0.50	1,770	<0.050	323,000	<0.50	2.12	<0.50	203	<0.30	61	583,000	13,300	19.4	9.41	<2.0	4,880,000	<0.050	<5.0	4.40	<0.50	225
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	26-Mar-12	D	5.8	<0.50	<2.0	151	<0.50	1,990	<0.050	230,000	<0.50	4.89	<0.50	20	<0.30	46	504,000	13,900	61.7	4.73	<2.0	4,700,000	<0.050	<5.0	5.38	<0.50	25.5
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	7-Jun-12	D	<5.0	<0.50	<2.0	189	<0.50	2,160	0.151	267,000	0.99	4.99	2.67	1,930	<0.30	62	641,000	13,800	56.9	12.7	<2.0	4,900,000	<0.050	<5.0	4.75	<0.50	123
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Sep-12	D	10.6	<0.50	<2.0	187	<0.50	2,560	<0.050	307,000	<0.50	3.62	0.57	435	<0.30	74	700,000	9,860	38.3	2.35	<2.0	5,540,000	<0.050	<5.0	4.42	<0.50	33.0
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Dec-12	D	11.3	<0.50	<2.0	147	<0.50	3,090	<0.050	249,000	<0.50	2.05	0.60	12	<0.30	74	592,000	5,370	35.7	1.41	<2.0	5,160,000	<0.050	<5.0	4.73	<0.50	85.4
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Jan-13	---	Well Not Sampled - Insufficient Water for Analysis																								
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	15-Mar-13	D	<5.0	<0.50	<2.0	106	<0.50	1,880	<0.050	208,000	<0.50	1.59	<0.50	62	<0.30	58	499,000	4,300	28.4	1.81	<2.0	4,450,000	<0.050	<5.0	3.59	<0.50	35.5
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	19-Jun-13	D	<5.0	<0.50	<2.0	97.9	<0.50	2,100	0.139	227,000	<0.50	0.231	1.16	49	<0.30	73	571,000	1,040	19.6	5.95	<2.0	4,970,000	<0.050	<5.0	3.49	<0.50	33.0
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	19-Jun-13	T	835	<0.50	2.1	104	<0.50	1,970	0.144	220,000	1.06	1.50	3.39	1,920	0.75	70	554,000	2,020	20.9	6.26	<2.0	4,830,000	<0.050	36.7	3.38	3.42	185
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	19-Sep-13	D	<5.0	<0.50	<3.0	207	<0.50	2,440	<0.050	327,000	<0.50	3.15	0.89	1,840	<0.30	68	775,000	7,340	25.7	4.14	<2.0	5,900,000	<0.050	<5.0	4.38	<0.50	18.4
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	20-Sep-13	T	329	<0.50	<6.0	213	<0.50	2,420	<0.050	337,000	0.91	4.20	1.86	4,100	0.31	72	829,000	7,570	28.1	7.36	<2.0	6,320,000	<0.050	16.4	4.22	2.64	28.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-Dec-13	D	<5.0	<0.50	5.3	192	<0.50	2,260	<0.050	324,000	<0.50	3.45	<0.50	4,420	<0.30	63	760,000	7,180	30.1	6.98	<2.0	6,020,000	<0.050	<5.0	4.55	<0.50	7.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-14	D	<5.0	<0.50	<2.0	126	<0.50	2,090	<0.050	223,000	<0.50	2.19	<0.50	1,520	<0.30	54	595,000	3,450	29.2	3.74	<2.0	4,700,000	<0.050	<5.0	3.2	<0.50	6.1
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	T	462	<0.50	3.4	120	<0.50	2,160	<0.050	214,000	0.54	2.92	2.12	3,270	0.58	56	552,000	3,880	23	13.2	<2.0	4,740,000	<0.050	20.2	3.22	2.19	32.2
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Jun-14	D	<5.0	<0.50	4.5	131	<0.50	2,620	<0.050	219,000	<0.50	1.01	0.77	2,330	<0.30	64	557,000	4,150	24.0	1.13	<2.0	4,990,000	<0.050	<5.0	2.94	<0.50	6.5
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Jun-14	T	125	<0.50	5.3	124	<0.50	2,570	<0.050	203,000	<0.50	1.11	0.69	2,630	<0.30	53	499,000	5,380	28.1	2.40	<2.0	4,800,000	<0.050	5.1	3.35	0.89	23.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	18-Sep-14	D	<5.0	<0.50	<2.0	134	<0.50	2,330	0.095	333,000	<0.50	0.861	0.75	<10	<0.30	89	859,000	1,880	8.6	3.08	<2.0	6,830,000	<0.050	<5.0	2.65	<0.50	25.9
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	18-Sep-14	T	Well Not Analyzed - Insufficient Water for Analysis																								
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Dec-14	D	<5.0	<0.50	<2.0	113	<0.50	2,120	<0.050	223,000	<0.50	0.843	<0.50	637	<0.30	60.0	542,000	3,330	10.5	1.46	<2.0	4,680,000	<0.050	<5.0	2.07	<0.50	4.7
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	4-Dec-14	T	107	<0.50	3.9	151	<0.50	2,290	<0.050	249,000	<0.50	1.35	0.73	3,050	<0.30	57	625,000	4,480	12.9	17.2	<2.0	5,180,000	<0.050	6.6	2.78	1.14	9.3
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-15	D	<5.0	<0.50	<2.0	96.4	<0.50	2,080	<0.050	208,000	<0.50	0.831	0.64	48	<0.30	51	514,000	1,940	15.4	2.23	<2.0	4,350,000	<0.050	<5.0	2.21	<0.50	5.9
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-15	T	815	<0.50	3.2	109	<0.50	2,030	<0.050	203,000	1.00	1.72	1.77	3,300	0.38	59	504,000	3,270	16.6	2.67	<2.0	4,300,000	<0.050	31.4	2.31	2.96	14.4
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-Jun-15	D	<5.0	<0.50	<2.0	156	<0.50	2,210	<0.050	293,000	<0.50	0.734	<0.50	196	<0.30	62	689,000	3,160	11.0	2.92	<2.0	5,430,000	<0.050	<5.0	1.91	<0.50	7.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-Jun-15	T	183	<0.50	8.1	172	<0.50	2,400	<0.050	283,000	<0.50	1.25	1.39	6,280	0.35	43	663,000	4,150	13.1	8.03	<2.0	5,230,000	<0.050	8.4	1.98	1.52	31.4
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-15	D	<5.0	<0.50	<2.0	167	<0.50	2,440	<0.050	331,000	<0.50	0.593	0.66	31	<0.30	79	851,000	2,680	8.4	1.50	<2.0	5,900,000	<0.050	<5.0	2.04	<0.50	31.2
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-15	T	175	<0.50	7.5	186	<0.50	2,660	<0.050	333,000	0.60	1.29	1.04	5,900	<0.30	78	844,000	3,930	9.7	1.99	<2.0	5,980,000	<0.050	9.1	2.28	1.57	32.3
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	9-Dec-15	D	<5.0	<0.50	<2.0	129	<0.50	1,990	<0.050	287,000	<0.50	0.609	<0.50	308	<0.30	42	687,000	2,800	7.4	1.36	<2.0	5,580,000	<0.050	<5.0	2.39	<0.50	10.0
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-15	T	163	<0.50	3.0	157	<0.50	2,140	<0.050	306,000	<0.50	0.551	0.94	2,240	<0.30	48	714,000	922	6.2	1.18	<2.0	5,500,000	<0.050	9.4	2.65	0.99	13.1
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	1-Mar-16	T	185	<0.50	3.1	116	<0.50	2,000	<0.050	198,000	<0.50	0.705	1.96	2,410	0.35	47	491,000	1,210	7.1	1.28	<2.0	4,180,000	<0.050	8.9	2.68	0.98	16.1
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	2-Mar-16	D	<5.0	<0.50	<2.0	17.1	<0.50	2,010	<0.050	242,000	<0.50	<0.050	1.09	12	<0.30	82	643,000	0.48	6.3	<0.50	<2.0	4,740,000	<0.050	<5.0	2.84	0.86	5.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	D	<5.0	<0.50	<2.0	85.7	<0.50	2,140	<0.050	231,000	<0.50	0.405	<0.50	513	<0.30	67	616,000	1,490	6.8	0.85	<2.0	4,780,000	<0.050	<5.0	1.57	<0.50	5.3
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	17-May-16	T	1,300	<0.50	4.0	113	<0.50	2,340	0.072	211,000	2.28	1.24	2.93	4,650	0.90	62	550,000	2,570	10.0	2.32	<2.0	4,490,000	<0.050	54.8	1.69	4.52	9.2
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Aug-16	D	<5.0	<0.50	2.7	115	<0.50	2,210	<0.050	279,000	<0.50	1.11	2.23	451	<0.30	75	672,000	1,890	39.6	1.86	<2.0	5,300,000	<0.050	<5.0	2.58	1.08	4.9
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	16-Aug-16	T	1,590	<0.50	4.6	140	<0.50	2,570	0.338	431,000	6.26	3.56	7.07	5,450	1.63	90.0	763,000	1,880	19.9	6.07	<2.0	5,970,000	<0.050	55.2	3.00	6.74	59.5
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	22-Nov-16	D	8.9	<0.50	<2.0	84.0	<0.50	2,150	0.057	235,000	<0.50	0.213	0.88	212	<0.30	68	611,000	861	4.6	<0.50	<2.0	5,060,000	<0.050	<5.0	1.33	<0.50	5.5
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	22-Nov-16	T	6,220	0.66	31.3	146	<0.50	2,350	0.331	213,000	13.2	5.94	31.1	42,500	8.69	92	569,000	2,240	5.9	6.99	<2.0	4,810,000	<0.050	198	1.91	28.0	137
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-17	D	56.7	<0.50	<2.0	62.3	<0.50	1,820	0.064	202,000	<0.50	0.275	1.43	294	<0.30	64	542,000	204	6.3	0.93	<2.0	4,740,000	<0.050	<5.0	1.61	<0.50	8.8
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	13-Mar-17	T	231	<0.50	<2.0	56.0	<0.50	1,740	0.062	230,000	0.58	0.458	1.44	629	<0.30	62	568,000	486	6.3	0.78	<2.0	4,580,000	<0.050	10.8	1.85	1.2	6.2
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	D	<5.0	<0.50	<2.0	41.3	<0.50	1,720	<0.050	151,000	<0.50	<0.050	1.18	<10	0.45	47	405,000	36.3	6.5	<0.50	<2.0	3,700,000	<0.050	<5.0	1.51	<0.50	6.3
P2.5-7I	Porewater EAZ	P2.5-7	CS	WB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	T	2,360	<0.50	3.4	69.9	<0.50	1,890	<0.050	177,000	4.01	1.66	7.47	5,360	1.76	66	481,000	1,290	6.7	1.94	<2.0	4,000,000	<0.050	98.9	1.51	8.77	14.6
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Oct-11	---	Well Not Sampled																								
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-11	D	6.6	<0.50	<2.0	135	<0.50	470	0.064	120,000	0.77	0.096	<0.50	<10	<0.30	<20	187,000	952	11.6	1.34	<2.0	1,190,000	<0.050	<5.0	1.72	0.74	75.1
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-12	D	47.1	<0.50	<2.0	138	<0.50	590	<0.050	135,000	<0.50	0.078	<0.50	76	<0.30	<20	221,000	120	4.2	0.67	<2.0	1,400,000	<0.050	<5.0	2.08	0.56	205
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Jun-12	D	<5.0	<0.50	<2.0	232	<0.50	750	0.221	196,000	0.56	1.01	<0.50	<10	<0.30	<20	333,000	6,040	14.0	1.20	<2.0	2,080,000	<0.050	<5.0	2.16	0.62	73.0
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Sep-12	D	<5.0	<0.50	<2.0	174	<0.50	780	<0.050	156,000	<0.50	<0.050	0.95	<10	<0.30	20	263,000	13.8	5.4	1.01	<2.0	1,840,000	<0.050	<5.0	2.72	<0.50	59.5
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	137	<0.50	740	<0.050	130,000	<0.50	0.352	<0.50	18	<0.30	<20	235,000	1,890	6.5	0.84	<2.0	1,530,000	<0.050	<5.0	1.65	<0.50	61.7
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	127	<0.50	670	<0.050	122,000	<0.50	<0.050	<0.50	<10	<0.30	<20	217,000	140	3.9	0.64	<2.0	1,480,000	<0.050	<5.0	1.83	<0.50	8.9
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	122	<0.50	760	0.152	133,000	<0.50	0.177	0.83	<10	<0.30	24	265,000	435	6.0	2.23	<2.0	1,730,000	<0.050	<5.0	1.93	<0.50	25.1
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Jun-13	D	<5.0	<0.50	<2.0	125	<0.50	760	<0.050	140,000	<0.50	0.087	1.08	<10	<0.30	<20	249,000	13.6	4.7	0.53	<2.0	1,860,000	<0.050	<5.0	1.93	0.60	6.0
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	D	<5.0	<0.50	<2.0	136	<0.50	810	<0.050	156,000	0.55	0.148	0.90	<10	<0.30	<20	279,000	135	6.7	0.54	<2.0	1,760,000	<0.050	<5.0	2.23	0.53	9.6
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	176	<0.50	670	<0.050	172,000	<0.50	0.097	<0.50	<10	<0.30	<20	327,000	0.70	2.5	0.74	<2.0	1,900,000	<0.050	<5.0	1.97	<0.50	8.2
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	D	<5.0	<0.50	<2.0	148	<0.50	660	<0.050	147,000	<0.50	0.078	0.70	<10	<0.30	<20	273,000	6.66	3.0	0.81	<2.0	1,650,000	<0.050	<5.0	2.01	<0.50	6.9
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	111	<0.50	640	<0.050	130,000	<0.50	<0.050	1.34	<10	<0.30	<20	239,000	8.00	4.8	0.80	<2.0	1,520,000	<0.050	<5.0	2.24	0.64	12.2
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	116	<0.50	710	<0.050	140,000	<0.50	<0.050	1.03	<10	<0.30	<20	251,000	395	6.9	1.04	<2.0	1,630,000	0.056	<5.0	2.33	0.67	8.8
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	97.7	<0.50	880	<0.050	135,000	0.71	<0.050	1.07	<10	<0.30	<20	241,000	10.6	3.1	0.55	<2.0	1,510,000	<0.050	<5.0	1.53	0.57	10.7
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	D	<5.0	<0.50	<2.0	124	<0.50	550	<0.050	123,000	<0.50	<0.050	0.96	<10	<0.30	<20	222,000	2.56	3.4	0.90	<2.0	1,360,000	<0.050	<5.0	2.05	<0.50	5.6
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	D	12.6	<0.50	<2.0	67.4	<0.50	500	<0.050	129,000	<0.50	<0.050	0.71	<10	<0.30	<20	215,000	200	7.3	0.86	<2.0	1,160,000	<0.050	<5.0	1.61	0.64	17.4
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	105	<0.50	670	<0.050	160,000	<0.50	<0.050	1.04	<10	<0.30	<20	299,000	445	9.1	1.43	<2.0	1,370,000	<0.050	<5.0	2.34	0.67	16.7
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	145	<0.50	590	<0.050	161,000	<0.50	<0.050	1.29	<10	<0.30	<20	285,000	0.47	<2.0	<0.50	<2.0	1,540,000	<0.050	<5.0	1.58	<0.50	13.9
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	142	<0.50	580	<0.050	158,000	<0.50	0.110	0.53	<10	<0.30	<20	282,000	1.42	<2.0	0.90	<2.0	1,540,000	<0.050	<5.0	2.15	<0.50	3.8
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	20-May-16	D	<5.0	<0.50	<2.0	122	<0.50	620	0.075	165,000	<0.50	<0.050	0.81	<10	<0.30	<20	297,000	21.1	2.6	<0.50	<2.0	1,670,000	<0.050	<5.0	2.34	<0.50	12.2
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	D	<5.0	<0.50	<2.0	101	<0.50	630	0.062	166,000	<0.50	0.090	0.81	<10	<0.30	<20	300,000	369	5.3	0.98	<2.0	1,510,000	<0.050	<5.0	2.11	0.81	5.7
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	D	<5.0	<0.50	<2.0	169	<0.50	530	0.101	179,000	<0.50	0.623	2.12	<10	<0.30	<20	318,000	533	3.0	3.65	<2.0	1,580,000	<0.050	<5.0	2.59	0.80	11.7
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	154	<0.50	360	0.064	180,000	<0.50	0.068	0.89	<10	<0.30	<20	318,000	17.9	<2.0	<0.50	<2.0	1,410,000	<0.050	<5.0	1.65	<0.50	7.2
P2.5-7D	Porewater	P2.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	110	<0.50	380	0.077	173,000	<0.50	0.091	0.62	<10	<0.30	<20	296,000	1,040	2.8	1.21	<2.0	1,280,000	<0.050	<5.0	0.970	0.54	6.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Dec-11	D	<5.0	<0.50	<2.0	19.2	<0.50	1,190	0.055	157,000	<0.50	0.297	0.65	<10	<0.30	46	333,000	53.3	2.6	0.82	<2.0	2,980,000	<0.050	<5.0	1.06	<0.50	28.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Jan-12	D	18.6	<0.50	<2.0	<1.0	<0.50	140	<0.050	6,420	<0.50	<0.050	1.72	25	<0.30	<20	8,010	0.37	<2.0	<0.50	<2.0	85,500	<0.050	<5.0	0.075	0.56	<3.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Feb-12	D	58.7	0.147	0.669	2.55	0.0057	67.6	0.0095	16,300	<0.50	0.298	1.65	122	0.169	3.1	11,900	562	0.589	0.68	<0.20	79,800	0.0033	2.10	0.12	0.543	4.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	D	<5.0	<0.50	<2.0	46.0	<0.50	1,470	<0.050	191,000	<0.50	0.281	0.55	<10	<0.30	54	409,000	157	<2.0	1.41	<2.0	3,580,000	<0.050	<5.0	0.832	<0.50	10.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Apr-12	D	20.7	<0.50	<2.0	58.9	<0.50	2,820	0.127	305,000	<0.50	1.06	1.39	790	0.33	116	741,000	491	3.9	2.49	<2.0	6,120,000	<0.050	<5.0	1.69	0.98	26.9
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	D	5.4	<0.50	<2.0	36.9	<0.50	2,530	0.100	246,000	<0.50	0.435	1.25	333	<0.30	90	650,000	311	3.2	1.23	<2.0	5,590,000	0.075	<5.0	1.23	<0.50	16.4
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-12	D	<5.0	<0.50	<2.0	44.0	<0.50	2,440	0.155	292,000	<0.50	0.450	16.2	354	<0.30	107	733,000	157	5.1	2.81	<2.0	5,860,000	<0.050	<5.0	1.11	<0.50	36.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	D	5.7	<0.50	<2.0	41.9	<0.50	2,180	0.131	225,000	<0.50	0.732	1.27	1,940	<0.30	76	625,000	220	2.3	1.28 J	<2.0	4,690,000	0.067	<5.0	0.672	<0.50	7.7
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	D	58.2	<0.50	<2.0	57.3	<0.50	2,470	0.099	287,000	<0.50	0.502	1.46	762	<0.30	87	767,000	187	2.0	1.16	<2.0	5,960,000	<0.050	6.1	0.848	0.63	7.3
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	D	<5.0	<0.50	<2.0	64.0	<0.50	3,370	0.160	345,000	<0.50	0.564	1.83	37	<0.30	109	931,000	90.3	3.2	2.30	<2.0	7,790,000	<0.050	<5.0	1.66	<0.50	7.5
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	D	<5.0	<0.50	<2.0	60.2	<0.50	3,560	0.274	358,000	<0.50	0.749	1.38	46	<0.30	109	924,000	82.0	2.7	3.19	<2.0	7,550,000	<0.050	<5.0	1.83	<0.50	12.4
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	7-Nov-12	D	4.2	0.125	0.35	2.25	<0.010	427	<0.010	20,600	<1.0	0.12	0.98	81	<0.10	19.4	45,500	16.7	2.05	<0.40	<0.40	587,000	<0.0040	<0.40	0.107	0.29	2.2
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-12	D	5.4	<0.50	<2.0	13.5	<0.50	1,260	<0.050	106,000	<0.50	0.603	3.56	409	<0.30	41	253,000	210	2.9	2.77	<2.0	2,090,000	<0.050	<5.0	0.595	<0.50	10.8

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	D	5.4	0.439	0.78	3.44	<0.010	561	<0.010	24,600	<1.0	<0.10	1.41	<30	<0.10	14.8	68,200	3.80	3.24	0.53	<0.40	660,000	<0.0040	<0.40	0.193	0.43	3.3
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	14-Mar-13	D	7.4	0.335	0.54	5.65	<0.010	422	0.091	37,700	<1.0	0.62	2.00	782	<0.10	16.4	82,800	201	3.55	1.62	<0.40	662,000	<0.0040	<0.40	0.236	0.44	9.7
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-13	D	<5.0	<0.50	<2.0	52.8	<0.50	2,320	<0.050	210,000	<0.50	1.51	0.92	875	<0.30	84	557,000	247	2.3	1.36	<2.0	4,110,000	<0.050	<5.0	0.768	<0.50	12.2
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-13	T	2,720	<0.50	9.0	68.2	<0.50	2,880	0.235	218,000	2.97	3.08	15.2	15,100	10.4	97	605,000	393	4.1	6.59	<2.0	4,550,000	<0.050	86.1	1.43	14.7	52.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	D	<5.0	<0.50	<2.0	68.1	<0.50	3,670	0.177	330,000	<0.50	0.797	1.52	308	<0.30	120	896,000	112	2.9	1.34	<2.0	7,650,000	<0.050	<5.0	0.834	<0.50	16.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	T	75.5	<0.50	<2.0	75.8	<0.50	3,690	0.184	341,000	<0.50	1.44	1.99	1,500	0.43	116	901,000	339	3.3	1.27 J+	<2.0	7,760,000	<0.050	<5.0	0.756	1.02	14.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	D	6.2	<0.50	<2.0	36.9	<0.50	2,110	0.279	256,000	<0.50	0.930	1.17	121	<0.30	72	676,000	61.5	3.2	1.67	<2.0	5,360,000	<0.050	<5.0	0.754	<0.50	20.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Dec-13	T	1,990	<0.50	4.8	48.4	<0.50	2,030	0.321	248,000	1.95	3.63	9.46	9,380	6.55	69	639,000	339	4.7	3.25	<2.0	5,170,000	<0.050	75.4	1.11	8.37	43.9
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	D	3.4	0.289	0.402	1.88	<0.0050	220	<0.0050	4,770	<0.50	0.208	2.22	<30	0.065	8.63	11,000	7.70	1.87	0.29	<0.20	209,000	<0.0020	<0.20	0.0391	0.205	4.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-14	T	375	0.319	1.36	4.30	0.0246	185	<0.0050	3,210	<0.50	1.09	3.36	2,470	1.22	7.87	7,270	99.5	2.33	0.54	<0.20	154,000	0.0047	13.8	0.155	2.11	5.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Jun-14	D	<5.0	<0.50	<2.0	60.2	<0.50	2,710	<0.050	259,000	1.05	1.58	1.37	398	<0.30	95	696,000	204	3.1	1.43	<2.0	5,390,000	<0.050	<5.0	0.885	1.10	14.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Jun-14	T	6,320	<0.50	7.6	73.1	<0.50	2,640	0.396	275,000	6.16	8.02	49.0	15,800	40.4	112	679,000	617	<2.0	7.46	<2.0	5,600,000	<0.050	68.1	2.06	31.7	92.7
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-14	D	<5.0	<0.50	<2.0	78.3	<0.50	3,180	0.161	332,000	<0.50	0.251	1.68	38	<0.30	114	897,000	33.3	<2.0	1.28	<2.0	7,690,000	<0.050	<5.0	0.590	<0.50	17.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-14	T	49,400	0.91	20.6	226	1.80	2,960	1.08	367,000	43.0	33.6	152	85,600	148	198	896,000	2,100	6.0	37.8	<2.0	7,710,000	0.056	1,250	6.45	180	362
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	28.1	<0.50	<2.0	35.0	<0.50	1,630	<0.050	207,000	<0.50	0.231	0.94	58	<0.30	58	523,000	31.7	2.2	60.3	<2.0	3,990,000	<0.050	<5.0	0.327	<0.50	16.7
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	2,720	0.92	4.2	57.7	<0.50	1,510	0.152	201,000	3.23	4.31	14.3	7,530	6.40	60.0	503,000	897	4.2	69.4	<2.0	3,830,000	<0.050	91.8	0.839	9.61	35.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	D	<5.0	<0.50	<2.0	59.6	<0.50	2,660	0.375	358,000	<0.50	0.090	2.06	15	<0.30	47	1,020,000	4.71	2.1	1.01	<2.0	8,180,000	<0.050	<5.0	0.392	<0.50	13.5
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-15	T	2,870	<0.50	3.0	91.8	<0.50	2,670	0.555	384,000	3.34	2.73	15.4	5,260	6.28	51	1,020,000	310	3.7	5.51	<2.0	7,880,000	<0.050	144	0.872	10.9	32.2
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Jun-15	D	<5.0	<0.50	<2.0	72.5	<0.50	2,820	0.233	334,000	<0.50	0.083	2.11	<10	<0.30	77	811,000	10.8	<2.0	1.04	<2.0	7,500,000	<0.050	<5.0	0.296	<0.50	16.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Jun-15	T	16.9	<0.50	<2.0	73.7	<0.50	2,830	0.204	329,000	<0.50	0.110	1.51	71	<0.30	76	815,000	17.1	<2.0	0.94	<2.0	7,430,000	<0.050	<5.0	0.294	<0.50	13.5
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	9-Sep-15	D	<5.0	<0.50	<2.0	65.0	<0.50	2,910	0.161	284,000	<0.50	0.069	2.72	<10	<0.30	89	814,000	5.56	2.2	1.27	<2.0	6,920,000	<0.050	<5.0	0.250	<0.50	22.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	9-Sep-15	T	16.9	<0.50	<2.0	62.9	<0.50	2,830	0.166	279,000	<0.50	0.091	2.54	68	<0.30	92	809,000	10.3	2.1	1.16	<2.0	6,490,000	<0.050	<5.0	0.238	<0.50	15.9
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Dec-15	D	5.1	0.328	0.259	1.41	<0.0050	211	<0.0050	6,640	<0.50	<0.050	2.53	<30	<0.050	5.53	17,000	10.2	3.63	0.31	<0.20	213,000	0.0030	<0.20	0.0488	0.359	10.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	8-Dec-15	T	230	0.604	0.687	3.73	0.0213	217	<0.0050	4,830	<0.50	0.512	3.77	644	0.664	5.15	12,800	91.7	3.83	0.51	<0.20	185,000	<0.0050	5.84	0.116	1.25	5.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Mar-16	D	<5.0	<0.50	<2.0	32.6	<0.50	1,250	0.144	156,000	<0.50	0.070	1.95	<10	<0.30	47	424,000	2.36	<2.0	1.07	<2.0	3,250,000	<0.050	<5.0	0.162	<0.50	10.9
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	1-Mar-16	T	55.2	<0.50	<2.0	32.4	<0.50	1,240	0.147	156,000	<0.50	0.526	2.45	368	0.57	49	428,000	65.1	<2.0	0.86	<2.0	3,230,000	<0.050	<5.0	0.231	0.68	10.6
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-May-16	D	<5.0	<0.50	<2.0	65.0	<0.50	2,700	0.305	315,000	<0.50	0.106	3.39	<10	<0.30	88	844,000	9.14	2.9	1.29	<2.0	7,120,000	<0.050	<5.0	0.564	<0.50	29.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	17-May-16	T	3,290	0.56	3.9	86.7	<0.50	2,860	0.669	335,000	4.45	8.38	35.5	8,470	11.4	97	857,000	966	6.3	6.35	<2.0	7,170,000	0.052	116	1.23	14.4	77.3
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Aug-16	D	<5.0	<0.50	<2.0	65.2	<0.50	2,850	0.211	308,000	<0.50	0.065	2.28	<10	<0.30	105	836,000	8.34	2.8	3.88	<2.0	7,890,000	<0.050	<5.0	0.582	<0.50	18.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	16-Aug-16	T	33.1	<0.50	<2.0	71.1	<0.50	3,380	0.200	306,000	1.79	0.363	2.98	279	0.42	109	842,000	70.4	3.6	4.33	<2.0	7,740,000	<0.050	<5.0	0.552	<0.50	17.3
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	22-Nov-16	D	8.8	<0.50	<2.0	23.2	<0.50	1,530	0.145	168,000	<0.50	<0.050	3.06	<10	0.49	60.0	409,000	4.99	2.0	<0.50	<2.0	3,490,000	<0.050	<5.0	0.191	<0.50	7.8
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	22-Nov-16	T	87.5	<0.50	<2.0	25.5	<0.50	1,560	0.154	179,000	<0.50	0.852	4.70	584	1.43	60.0	434,000	131	2.2	<0.50	<2.0	3,700,000	<0.050	<5.0	0.270	0.93	11.4
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-17	D	3.4	0.240	0.17	4.10	<0.010	370	0.010	14,700	<1.0	<0.10	1.99	<30	0.14	12.2	41,700	<0.40	4.25	<0.40	<0.40	552,000	<0.0040	<0.40	0.121	0.24	3.1
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-17	T	118	0.283	0.42	5.02	<0.010	444	0.030	30,300	<1.0	0.67	3.0	482	0.78	15.8	82,100	91	4.03	<0.40	<0.40	882,000	<0.010	2.95	0.208	0.87	<6.0
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-17	D	<5.0	<0.50	<2.0	48.0	<0.50	1,990	0.232	259,000	<0.50	<0.050	2.82	<10	0.33	77	684,000	2.63	3	0.77	<2.0	5,420,000	<0.050	<5.0	0.355	<0.50	14.5
P3-3	Porewater EAZ	P3-3	OB	WB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	6-Jun-17	T	127	<0.50	<2.0	55.5	<0.50	2,300	0.239	266,000	<0.50	1.25	4.81	758	1.34	95	707,000	191	3.7	1.4	<2.0	5,760,000	<0.050	5.7	0.601	1.17	13.6
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	D	<5.0	<0.50	<2.0	166	<0.50	980	<0.050	183,000	<0.50	6.98	<0.50	<10	<0.30	33	314,000	9,560	<2.0	4.43	<2.0	2,610,000	<0.050	<5.0	2.51	<0.50	23.6
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Nov-11	D	<5.0	<0.50	<2.0	178	<0.50	1,180	0.069	271,000	<0.50	17.2	<0.50	<10	<0.30	40	468,000	13,700	2.3	11.2	<2.0	3,460,000	<0.050	<5.0	5.52	<0.50	111
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Dec-11	D	6.9	<0.50	<2.0	152	<0.50	1,300	0.068	225,000	<0.50	17.5	0.67	<10	<0.30	36	457,000	10,200	<2.0	6.65	<2.0	3,450,000	0.058	<5.0	2.45	<0.50	182
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jan-12	D	<5.0	<0.50	<2.0	104	<0.50	1,150	0.111	183,000	<0.50	12.5	0.86	<10	<0.30	37	385,000	7,360	<2.0	4.36	<2.0	2,680,000	<0.050	<5.0	1.73	<0.50	98.5
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	2-Feb-12	D	<30	<0.10	0.88	76.7	<0.050	997	<0.050	123,000	<5.0	7.04	<5.0	660	<0.50	27.5	262,000	4,930	1.19	4.5	<2.0	2,080,000	<0.020	<2.0	1.37	<0.50	115
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-12	D	<5.0	<0.50	<2.0	65.4	<0.50	1,030	<0.050	111,000	<0.50	5.39	0.91	15	<0.30	28	249,000	4,470	<2.0	10.4	<2.0	2,280,000	<0.050	<5.0	1.45	<0.50	93.5
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Apr-12	D	5.7	<0.50	<2.0	96.1	<0.50	1,080	0.063	120,000	<0.50	7.66	1.28	2,990	<0.30	30	236,000	7,110	<2.0	6.22	<2.0	2,120,000	<0.050	<5.0	2.62	<0.50	47.7
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-May-12	D	<5.0	<0.50	<2.0	100	<0.50	1,060	<0.050	129,000	<0.50	8.19	<0.50	1,960	<0.30	25	274,000	5,180	<2.0	3.65	<2.0	2,300,000	<0.050	<5.0	1.59	<0.50	47.6
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	D	<5.0	<0.50	2.4	120	<0.50	1,050	<0.050 UJ	162,000	<0.50	10.9 J	<0.50	3,890 J	<0.30	30	339,000	5,780	<2.0	4.24 J	<2.0	2,410,000	<0.050	<5.0	1.56 J	<0.50	31.2 J
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jul-12	D	<5.0	<0.50	<2.0	131	<0.50	1,100	<0.050	194,000	<0.50	9.49	<0.50	2,680	<0.30	32	356,000	8,130	<2.0	7.40	<2.0	2,500,000	<0.050	<5.0	2.97	<0.50	147
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	3-Aug-12	D	16.2	<0.50	2.3	135	<0.50	1,320	0.097	187,000	<0.50	11.2	0.72	3,260	<0.30	34	381,000	6,600	<2.0	4.39	<2.0	2,850,000	<0.050	<5.0	1.89	<0.50	52.1
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	147	<0.50	1,390	0.089	228,000	<0.50	11.2	<0.50	1,990	<0.30	38	437,000	7,950	<2.0	7.20	<2.0	3,110,000	<0.050	<5.0	2.25	<0.50	80.9
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Oct-12	D	<5.0	<0.50	<3.0	195	<0.50	1,370	0.051	288,000	<0.50	17.0	0.55	4,890	<0.30	41	558,000	9,980	<2.0	5.27	<2.0	3,870,000	<0.050	<5.0	2.30	<0.50	17.1
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Nov-12	D	<5.0	<0.50	<2.0	168	<0.50	1,200	0.077	277,000	<0.50	14.8	1.88	1,830	<0.30	40	584,000	9,440	<2.0	9.97	<2.0	3,850,000	<0.050	<5.0	2.18	<0.50	128
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Dec-12	D	5.8	<0.50	<2.0	39.4	<0.50	3,340	0.447	284,000	<0.50	2.10	0.74	24	<0.30	110	855,000	1,390	7.2	1.74	<2.0	6,710,000	0.089	<5.0	2.57	0.89	25.2
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	89.3	<0.50	2,030	<0.050	255,000	<0.50	8.21	<0.50	226	<0.30	58	548,000	7,520	2.5	5.67	<2.0	4,150,000	0.094	<5.0	3.66	<0.50	384
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Mar-13	D	<5.0	<0.50	2.6	106	<0.50	1,290	0.114	214,000	<0.50	10.5	0.71	2,500	<0.30	31	462,000	5,830	<2.0	3.58	<2.0	3,180,000	<0.050	<5.0	2.29	<0.50	35.3
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-13	D	<5.0	<0.50	<2.0	96.1	<0.50	1,120	<0.050	164,000	<0.50	8.09	<0.50	1,790	<0.30	31	358,000	4,860	<2.0	3.03	<2.0	2,510,000	<0.050	<5.0	1.67	<0.50	32.2
P3-7D-A @	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	2.3	121	<0.50	1,340	<0.050	233,000	<0.50	7.87	<0.50	4,050	<0.30	35	392,000	9,740	<2.0	3.33	<2.0	3,050,000	<0.050	<5.0	4.01	<0.50	13.2
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	D	5.4	<0.50	<2.0	151	<0.50	1,380	<0.050	284,000	<0.50	10.1	<0.50	3,050	<0.30	36	559,000	6,920	<2.0	2.67	<2.0	3,820,000	<0.050	<5.0	1.96	<0.50	23.4
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	144	<0.50	1,270	0.093	310,000	<0.50	13.5	<0.50	3,970	<0.30	37	656,000	8,910	<2.0	2.79	<2.0	4,010,000	<0.050	<5.0	2.22	<0.50	94.2
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	126	<0.50	1,320	0.084	273,000	<0.50	10.9	0.95	597	<0.30	31	588,000	7,810	<2.0	2.75	<2.0	3,690,000	<0.050	<5.0	2.20	<0.50	98.7
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	91.3	<0.50	1,170	<0.050	226,000	<0.50	9.08	0.52	3,160	<0.30	32	476,000	7,970	<2.0	2.95	<2.0	3,250,000	<0.050	<5.0	2.69	<0.50	28.8
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	152	<0.50	1,530	<0.050	297,000	<0.50	11.8	<0.50	3,330	<0.30	35	648,000	7,040	<2.0	2.76	<2.0	4,120,000	<0.050	<5.0	1.63	<0.50	<3.0
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	119	<0.50	1,480	<0.050	262,000	<0.50	9.13	<0.50	3,820	<0.30	33	523,000	6,850	<2.0	2.56	<2.0	3,630,000	<0.050	<5.0	1.98	<0.50	4.8
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	D	7.3	<0.50	<2.0	101	<0.50	1,230	<0.050	223,000	<0.50	5.21	0.79	2,120	<0.30	21	437,000	6,170	<2.0	2.01	<2.0	3,500,000	<0.050	<5.0	2.22	<0.50	14.4
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Jun-15	D	9.3	<0.50	<2.0	118	<0.50	1,380	<0.050	243,000	<0.50	7.27	<0.50	1,800	<0.30	24	499,000	4,990	<2.0	1.65	<2.0	3,570,000	<0.050	<5.0	1.23	<0.50	65.6
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	134	<0.50	1,400	<0.050	302,000	<0.50	10.6	0.56	2,340	<0.30	32	632,000	6,670	<2.0	2.84	<2.0	3,990,000	<0.050	<5.0	1.21	<0.50	50.7
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Dec-15	---	Well Not Sampled - Not Found																								
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	114	<0.50	1,450	<0.050	316,000	<0.50	10.0	<0.50	4,180	<0.30	35	640,000	8,900	<2.0	2.75	<2.0	3,820,000	<0.050	<5.0	2.34	<0.50	11.8
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-May-16	D	<5.0	<0.50	<2.0	109	<0.50	1,440	<0.050	236,000	<0.50	7.10	<0.50	3,030	<0.30	32	524,000	7,220	<2.0	2.62	<2.0	3,380,000	<0.050	<5.0	1.49	<0.50	18.3
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Aug-16	D	<5.0	<0.50	<2.0	107	<0.50	1,430	<0.050	262,000	<0.50	10.8	<0.50	2,960	<0.30	33	567,000	6,450	<2.0	2.17	<2.0	3,680,000	<0.050	<5.0	1.40	<0.50	24.1
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	D	62.7	<0.50	<2.0	111	<0.50	1,430	<0.050	316,000	<0.50	11.2	1.75	2,950	<0.30	36	665,000	7,550	<2.0	3.04	<2.0	4,260,000	<0.050	<5.0	1.48	<0.50	16.1
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	47.2	<0.50	1,290	0.066	176,000	<0.50	1.32	1.48	190	<0.30	41	392,000	883	<2.0	0.59	<2.0	3,210,000	<0.050	<5.0	1.33	<0.50	179
P3-7D	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	---	Well Not Sampled - Not Found																								
P3R-7S	Porewater EAZ	P3R-7	DS	WB	0.8-1.0	0.8	1.0	Beach sand	---	12-Sep-12	---	Well Destroyed																								
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11	D	<6.0	0.053	3.69	4.29	<0.010	374	<0.010	30,700	<1.0	0.45	<1.0	121	<0.10	11.5	53,900	398	2.66	0.99	1.49 J	501,000	<0.0040	0.42	0.182	1.43	<6.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Dec-11	D	6.0	0.047	1.83	4.02	<0.0050	258	0.0056	30,000	<0.50	0.147	<0.50	<30	<0.050	<20	38,500	386	2.89	0.3	0.26	339,000	<0.0020	<0.20	0.152	0.676	11.3
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jan-12	D	5.8	<0.50	<2.0	4	<0.50	310	<0.050	37,800	<0.50	0.158	<0.50	<10	<0.30	<20	48,600	415	2.9	<0.50	<2.0	393,000	<0.050	<5.0	0.187	<0.50	6.2
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	2-Feb-12	D	6.5	0.037	1.61	3.53	<0.010	229	<0.010	38,900	<1.0	0.14	<1.0	<30	<0.10	8.08	40,800	425	3.38	<0.40	<0.40	332,000	<0.0040	<0.40	0.181	0.41	<6.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	13-Mar-12	D	<6.0	0.027	1.35	4.24	<0.010	276	<0.010	49,000	<1.0	<0.10	<1.0	<30	<0.10	10.9	52,900	467	3.07	<0.40	<0.40	412,000	<0.0040	<0.40	0.203	0.30	9.7
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Apr-12	D	7.5	0.027	1.27	5.84	<0.010	278	<0.010	57,600	<1.0	<0.10	<1.0	44	<0.10	11.0	64,100	495	3.16	0.79	<0.40	481,000	0.0059	<0.40	0.210	0.19	<6.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-May-12	D	<6.0	0.043	1.21	4.89	<0.010	246	<0.010	57,400	<1.0	<0.10	<1.0	<30	<0.10	9.65	54,700	265	3.14	<0.40	<0.40	375,000	0.0058	<0.40	0.187	0.18	11.4
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Jun-12	D	9.5	<0.50	<9.0	31.2	<0.50	2,480	<0.050	252,000	<0.50	0.252	<0.50	117	<0.30	92	630,000	5,020	<2.0	1.61	<2.0	5,060,000	<0.050	<5.0	1.14	3.46	<3.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Jul-12	D	7.4	<0.50	16.1	23.0	<0.50	2,040	<0.050	206,000	<0.50	0.190	<0.50	<150	<0.30	71	481,000	2,040	<2.0	1.61	<2.0	4,100,000	<0.050	<5.0	1.46	2.55	<3.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	3-Aug-12	D	10.6	0.075	5.29	4.21	<0.010	639	<0.010	45,000	<1.0	0.12	<0.40	81	<0.10	21.0	84,800	237	0.14	0.81	4.29	780,000	0.0043	1.34	0.236	1.62	<2.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Sep-12	D	6.2	0.119	1.98	3.70	<0.010	347	<0.010	40,800	<1.0	<0.10	<0.40	<30	0.11	14.0	66,400	189	<0.10	1.14	1.18	443,000	<0.0040	0.70	0.131	0.82	2.5
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Oct-12	D	6.1	<0.020	1.36	3.91	<0.010	349	0.013	59,000	<1.0	<0.10	<0.40	44	<0.10	15.2	80,200	248	0.13	0.97	0.63	532,000	<0.0040	0.47	0.124	0.53	<2.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	7-Nov-12	D	3.7	0.028	1.17	3.33	<0.0050	283	<0.0050	46,500	<0.50	0.063	<0.20	58	<0.050	12.1	46,700	229	0.112	0.82	0.28	284,000	<0.0020	0.39	0.0762	0.475	2.2
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Dec-12	D	3.5	0.024	0.78	2.12	<0.010	275	<0.010	58,800	<1.0	<0.10	<0.40	<30	<0.10	10.4	66,400	253	0.56	0.62	<0.40	443,000	<0.0040	<0.40	0.153	0.26	<2.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	8-Jan-13	D	2.1	0.041	1.03	2.31	<0.0050	297	<0.0050	63,000	<0.50	<0.050	<0.20	41	<0.050	10.9	48,500	241	0.649	0.38	<0.20	310,000	<0.0020	<0.20	0.157	0.203	1.7
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Mar-13	D	3.6	0.021	0.694	2.19	<0.0050	185	0.0482	64,500	<0.50	0.119	0.21	<30	<0.050	9.29	40,400	249	0.360	0.53	<0.20	215,000	<0.0020	<0.20	0.124	0.166	2.7
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	14-Jun-13	D	10.7	<0.50	21.9	42.3	<0.50	2,250	<0.050	331,000	<0.50	0.173	<0.50	74	<0.30	81	534,000	1,130	<2.0	2.39	2.0	4,580,000	<0.050	<5.0	1.30	0.94	<3.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	17-Sep-13	D	3.1	0.088	0.77	7.80	<0.010	457	<0.010	84,500	<1.0	0.14	<0.40	<30	<0.10	18.3	110,000	229	0.18	0.56	1.59	871,000	<0.0040	<0.40	0.204	0.24	<2.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	12-Dec-13	D	3.1	0.095	0.58	4.28	<0.010	422	<0.010	82,200	<1.0	<0.10	<0.40	<30	<0.10	15.7	101,000	278	0.47	<0.40	<0.40	774,000	<0.0040	<0.40	0.214	0.20	<2.0
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	11-Mar-14	D	2.1	0.022	0.468	2.73	<0.0050	219	<0.0050	72,700	<0.50	0.068	<0.20	<30	<0.050	8.66	43,300	278	0.445	0.23	<0.20	284,000	<0.0020	<0.20	0.111	0.125	1.4
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	10-Jun-14	D	2.4	0.013	0.627	3.45	<0.0050	209	<0.0050	75,700	<0.50	<0.050	<0.20	31	<0.050	9.18	50,800	383	0.256	0.28	0.27	315,000	<0.0020	<0.20	0.117	0.117	4.4
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	9-Sep-14	D	3.1	<0.020	1.00	5.31	<0.010	326	0.016	91,000	<1.0	<0.10	<0.40	<30	<0.10	13.7	78,600	468	0.37	0.42	0.52	539,000	<0.0040	<0.40	0.157	0.14	2.5
P3R-7I	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	1-Dec-14	---	No Sample Collected - Well Destroyed																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	D	9.8	0.161	0.622	23.7	<0.0050	119	0.0094	42,300	<0.50	<0.050	<0.50	<30	<0.050	<20	12,200	13.7	4.03	0.36	<0.20	65,500	0.0058	<0.20	0.105	0.43	6.6
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jan-12	D	8.0	<0.50	<2.0	27.6	<0.50	120	<0.050	55,600	<0.50	<0.050	<0.50	<10	<0.30	<20	15,800	15.1	<2.0	<0.50	<2.0	70,400	<0.050	<5.0	0.137	0.5	<3.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	2-Feb-12	D	8.6	0.055	0.664	22.8	<0.0050	112	0.0113	59,800	<0.50	<0.050	0.72	<30	0.165	1.73	16,800	9.98	1.24	0.37	<0.20	80,100	0.0144	<0.20	0.11	0.472	8.4
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12	D	6.4	0.045	0.712	28.6	<0.0050	115	0.0224	56,900	<0.50	0.102	<0.50	<30	<0.050	2.02	16,300	26.6	1.29	0.33	<0.20	76,900	0.0182	<0.20	0.117	0.689	<3.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Apr-12	D	<6.0	0.069	1.13	27.8	<0.010	121	<0.010	55,500	<1.0	<0.10	<1.0	<30	<0.10	2.90	16,300	37.1	1.98	0.48	<0.40	85,200	0.0077	<0.40	0.228	0.57	<6.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	D	5.9	0.067	1.14	27.7	<0.0050	111	0.0089	54,800	<0.50	<0.050	<0.50	<30	<0.050	3.18	14,900	52.9	1.23	0.35	<0.20	80,500	0.0116	<0.20	0.160	0.640	6.4
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12	D	4.7	0.054	1.01	26.8	<0.0050	118	0.0155 J	54,300	<0.50	<0.050	0.25 J	<30	<0.050 UJ	3.80	14,400	105	0.992	0.34 J	<0.20	76,700	0.0061	<0.20	0.133	0.606	2.4 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	D	4.1	0.046	1.02	28.4	<0.0050	111	0.0155	54,600	<0.50	0.059	0.46 J	<30	<0.050	3.41	16,700	174	0.721	0.31	<0.20	89,700	0.0111	<0.20	0.115	0.470	2.0 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12	D	4.0	0.055	0.871	26.6	<0.0050	127	0.0369	52,600	<0.50	0.057	0.84 J	33	0.070	3.66	15,400	84.2	0.600	0.34 J	<0.20	87,400	0.0053	<0.20	0.0999	0.466	5.0 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12	D	3.5 J	0.065	1.24	33.3	<0.0050	118	<0.0050	50,400	<0.50	0.085 J	<0.20 UJ	43 J	<0.050	4.26	15,300	278	0.790	0.26 J	<0.20	87,800	<0.0020	<0.20 UJ	0.142	0.421	<1.0 UJ
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Oct-12	D	3.5	0.053	1.34	32.8	<0.0050	124	0.0064	58,000	<0.50	0.104	0.34	<30	<0.050	4.21	17,000	289	0.748	0.30	<0.20	92,100	<0.0020	<0.20	0.141	0.283	1.6
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12	D	3.4	0.061	1.09	29.1	<0.0050	116	0.0295	56,700	<0.50	<0.050	0.75 J	<30	<0.050	3.52	17,200	12.4	0.695	0.63	<0.20	90,100	0.0027	<0.20	0.128	0.371	7.6
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Dec-12	D	3.1	0.057	1.14	33.3	<0.0050	131	<0.0050	54,600	<0.50	0.068	0.43	<30	<0.050	2.79	16,500	127	1.11	0.35	<0.20	87,000	<0.0020	<0.20	0.147	0.342	2.2
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-Jan-13	D	2.9	0.046	1.00	31.6	<0.0050	159	0.0103	60,800	<0.50	<0.050	0.29	<30	<0.050	2.33	17,500	16.4	1.06	0.45	<0.20	87,200	0.0085	<0.20	0.126	0.388	2.7
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Mar-13	D	4.2	0.041	0.757	27.2	<0.0050	108	<0.0050	57,600	<0.50	0.055	0.25	<30	<0.050	3.35	16,100	108	0.703	0.31	<0.20	83,200	<0.0020	<0.20	0.105	0.354	2.5
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	14-Jun-13	D	3.3	0.037	0.844	34.7	<0.0050	216	0.0109	59,300	<0.50	0.110	0.58	<30	<0.050	6.07	42,400	375	0.496	0.45	<0.20	315,000	0.0028	<0.20	0.100	0.160	2.8
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-Sep-13	D	2.2 J	0.028 J	0.569	37.4	<0.0050	121	<0.0050 UJ	57,800	<0.50	0.155 J	<0.20 UJ	<30	<0.050	1.63	17,700	591	0.227	0.65 J	<0.20	90,600	<0.0020	<0.20	0.0324	0.082	1.1 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13	D	2.6 J	0.107	0.495	35.7	<0.0050	128	0.179 J	67,600	<0.50	0.098 J	0.53 J	<30	<0.050	1.47	20,400	235	0.217	0.81	<0.20	92,900	<0.0020	<0.20	0.0259	0.082	4.8 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-14	D	2.0	0.026	0.388	39.6	<0.0050	121	<0.0050	72,800	<0.50	0.065 J	<0.20 UJ	<30	<0.050	1.31	21,300	489	0.182	<0.20 UJ	<0.20	94,800	<0.0020	<0.20	0.0197	0.051	<1.0 UJ
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	10-Jun-14	D	1.5	<0.010	0.359 J	37.6	<0.0050	128	<0.0050	65,700	<0.50	0.065	0.29 J	36	<0.050	1.71	20,700	510	0.177	0.23	<0.20	89,000	<0.0020	<0.20	0.0190	<0.050	1.8 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-14	D	1.4	0.015	0.380	44.2	<0.0050	125	0.0242	73,900	<0.50	0.069	0.48	44	<0.050	1.25	22,600	586	0.147	0.32	<0.20	89,300	<0.0020	<0.20	0.0101	<0.050	2.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	D	1.4 J	0.014 J	0.371	46.0	<0.0050	132	<0.0050	80,200	<0.50	<0.050	0.41 J	31	<0.050	1.26	24,600	518	0.148	0.30 J	<0.20	106,000	<0.0020	<0.20	0.0115	<0.050	3.1 J
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	11-Mar-15	D	1.6	0.121	0.284	54.4	<0.0050	123	0.0135	84,300	<0.50	<0.050	0.87	<30	0.063	0.91	25,700	617	0.140	0.45	<0.20	107,000	<0.0020	<0.20	0.0063	<0.050	6.9
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Jun-15	D	1.5	0.021	0.489	58.6	<0.0050	121	0.0084	84,300	<0.50	<0.050	0.46	<30	<0.050	1.00	24,400	815	0.124	0.26	<0.20	99,000	<0.0020	<0.20	0.0057	<0.050	51.2
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Sep-15	D	1.7	0.017	0.223	48.2	<0.0050	124	0.0172	87,700	<0.50	<0.050	0.74	<30	0.062	1.27	28,900	300	0.165	0.43	<0.20	101,000	<0.0020	<0.20	0.0069	<0.050	6.8
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	9-Dec-15	D	2.8	0.025	0.373	63.4	<0.0050	126	<0.0050	112,000	1.29	0.059	0.46	86	<0.050	1.18	31,000	738	0.100	0.37	<0.20	115,000	<0.0020	<0.20	0.0107	<0.050	4.0
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Mar-16	---	Well Not Sampled - Not Found																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	17-May-16	---	Well Not Sampled - Not Found																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	16-Aug-16	---	Well Not Sampled - Not Found																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	22-Nov-16	---	Well Not Sampled - Not Found																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-17	---	Well Not Sampled - Not Found																								
P3R-7D	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jun-17	---	Well Not Sampled - Not Found																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-12	D	7.9	<0.50	<2.0	18.7	<0.50	1,870	<0.050	143,000	<0.50	<0.050	1.11	<10	<0.30	61	365,000	0.44	4.3	1.08	<2.0	3,540,000	<0.050	<5.0	1.46	0.97	5.2
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	7-Jun-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Sep-12	---	Well Not Sampled - Dry																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Dec-12	D	<5.0	<0.50	<2.0	26.9	<0.50	2,820	0.050	219,000	<0.50	<0.050	1.03	<10	<0.30	80	503,000	0.23 J	5.2	0.83 J	<2.0	4,200,000	<0.050	<5.0	2.41	0.96	7.7
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	9-Jan-13	---	Well Not Sampled																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-13	D	<5.0	<0.50	<2.0	14.8	<0.50	1,590	0.135	116,000	<0.50	0.120	2.02	<10	<0.30	59	293,000	0.62	5.2	4.23	<2.0	2,780,000	<0.050	<5.0	1.42	0.85	17.8
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	19-Jun-13	D	16.0	<0.50	<2.0	26.0	<0.50	1,950	0.198	208,000	<0.50	0.125	2.48	39	<0.30	77	451,000	1.35	4.9	3.03	<2.0	4,140,000	<0.050	<5.0	2.03	1.19	11.4
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	19-Jun-13	T	68,500	1.03	27.7	298	2.93	1,870	1.39	280,000	669	57.9	382	89,100	97.7	175	481,000	7,050	9.9	299	<2.0	4,080,000	0.633	1,190	6.55	177	782
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	---	Well Not Sampled - Insufficient Water for Analysis																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-Dec-13	D	<5.0	<0.50	<2.0	32.8	<0.50	2,300	0.256	305,000	<0.50	<0.050	1.40	<10	<0.30	81	702,000	0.57	4.3	0.60	<2.0	5,590,000	<0.050	<5.0	2.64	0.92	5.1
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	12-Dec-13	T	4,300	0.73	2.6	43.2	<0.50	1,880	0.240	261,000	19.6	3.07	14.6	5,180	4.91	70	571,000	337	4.6	12.0	<2.0	4,450,000	0.062	155	2.58	11.3	62.2
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-14	D	5.3	<0.50	<2.0	17.6	<0.50	2,110	0.059	190,000	<0.50	0.098	1.41	<10	<0.30	66	465,000	1.27	5.2	0.61	<2.0	4,100,000	<0.050	<5.0	1.72	1.01	6.5
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-14	T	2,290	<0.50	<2.0	28.6	<0.50	2,110	0.122	191,000	3.04	1.33	4.78	2,290	2.65	67	452,000	153	5.4	3.72	<2.0	4,040,000	<0.050	74.4	1.98	6.39	16.7
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	---	Well Not Sampled - Insufficient Water for Analysis																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Sep-14	D	<5.0	<0.50	<2.0	31.4	<0.50	1,820	0.296	264,000	<0.50	<0.050	0.94	<10	<0.30	80.0	594,000	0.74	4.6	0.67	<2.0	4,510,000	0.093	<5.0	1.89	1.27	5.1
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Sep-14	T	313	<0.50	<2.0	34.3	<0.50	1,840	0.351	301,000	0.95	0.223	1.60	439	0.44	80.0	630,000	32.2	4.6	1.01	<2.0	4,970,000	0.103	14.8	2.03	2.02	3.7
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	---	Sample Not Collected - Insufficient Water for Analysis																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-15	D	<5.0	<0.50	<2.0	23.2	<0.50	1,750	0.192	269,000	<0.50	<0.050	1.33	<10	<0.30	45	622,000	1.38	5.3	0.53	<2.0	4,460,000	0.070	<5.0	1.80	0.86	5.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-15	T	43.4	<0.50	<2.0	24.7	<0.50	1,890	0.206	304,000	<0.50	<0.050	0.98	57	<0.30	48	659,000	4.87	5.6	0.58	<2.0	4,730,000	0.071	<5.0	1.89	0.96	3.7
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	D	<5.0	<0.50	<2.0	31.8	<0.50	2,490	0.333	318,000	<0.50	<0.050	1.09	<10	<0.30	73	752,000	0.81	5.4	1.07	<2.0	5,630,000	0.101	<5.0	1.94	1.07	6.8
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	T	439	<0.50	<2.0	33.9	<0.50	2,400	0.356	312,000	1.54	0.325	1.79	528	0.53	71	733,000	35.6	5.3	1.28	<2.0	5,470,000	0.102	19.1	1.98	2.21	4.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-15	---	Incomplete Analysis - Insufficient water in well																								
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	10-Dec-15	D	<5.0	<0.50	<2.0	11.8	<0.50	1,980	0.200	162,000	<0.50	<0.050	0.74	<10	<0.30	73	419,000	0.54	5.5	2.88	<2.0	3,530,000	0.061	<5.0	1.17	1.05	7.1
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	10-Dec-15	T	4,470	<0.50	3.3	40.4	<0.50	1,980	0.510	346,000	17.4	2.82	13.4	7,010	4.94	88	416,000	463	5.4	10.1	<2.0	3,490,000	0.124	175	1.68	14.3	58.9
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-16	D	<5.0	<0.50	<2.0	15.3	<0.50	1,910	0.185	183,000	<0.50	<0.050	1.36	<10	<0.30	60.0	449,000	<0.20	6.2	0.54	<2.0	4,060,000	0.065	<5.0	1.46	0.81	12.5
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-16	T	223	<0.50	<2.0	26.8	<0.50	1,840	0.204	251,000	1.80	0.226	2.25	298	0.35	59	452,000	31.9	6.0	0.97	<2.0	4,050,000	0.068	8.6	1.49	1.42	5.1
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	D	<5.0	<0.50	<2.0	24.6	<0.50	2,050	0.351	269,000	<0.50	<0.050	1.25	<10	<0.30	72	612,000	0.55	6.7	0.61	<2.0	4,660,000	0.118	<5.0	2.04	1.04	8.2
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	17-May-16	T	126	<0.50	<2.0	27.2	<0.50	2,420	0.412	288,000	0.93	0.136	1.33	145	<0.30	86	617,000	11.6	6.2	0.87	<2.0	4,710,000	0.135	5.2	2.12	1.32	<3.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	D	<5.0	<0.50	<2.0	31.4	<0.50	2,310	0.456	329,000	<0.50	<0.050	1.06	<10	<0.30	94	728,000	<0.20	6.1	1.38	<2.0	5,400,000	0.186	<5.0	2.22	1.17	<3.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	16-Aug-16	T	1,900	<0.50	<2.0	44.3	<0.50	2,440	0.574	325,000	13.1	1.24	7.16	2,250	2.66	88	639,000	180	6.7	7.12	<2.0	5,080,000	0.268	72.5	2.06	5.05	12.8
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	25-Nov-16	D	13.2	<0.50	<2.0	18.3	<0.50	1,900	0.224	217,000	<0.50	<0.050	0.68	29	<0.30	67	539,000	5.67	6.2	<0.50	<2.0	4,290,000	0.099	<5.0	1.47	0.72	<3.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	25-Nov-16	T	2,040	<0.50	<2.0	26.2	<0.50	1,980	0.298	218,000	4.49	1.30	4.74	2,380	2.90	69	530,000	202	6.4	3.83	<2.0	3,990,000	0.135	71.8	1.76	5.01	9.3
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-17	D	10.0	<0.50	<2.0	17.1	<0.50	1,650	0.093	176,000	<0.50	<0.050	1.23	22	<0.30	61	440,000	2.93	6.2	<0.50	<2.0	3,690,000	<0.050	<5.0	1.48	0.84	<3.0
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	15-Mar-17	T	190	<0.50	<2.0	15.1	<0.50	1,680	0.120	177,000	<0.50	0.159	1.16	259	0.34	57	406,000	24.3	6.3	<0.50	<2.0	3,700,000	<0.050	5.9	1.31	1.35	4
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	D	<5.0	<0.50	<2.0	20.1	<0.50	1,870	0.138	221,000	<0.50	<0.050	0.89	<10	<0.30	74	521,000	0.55	5.9	<0.50	<2.0	4,240,000	0.115	<5.0	1.51	0.86	<3.0

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P3-12S	Porewater EAZ	P3-12	DS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Jun-17	T	859	<0.50	<2.0	24.2	<0.50	1,930	0.231	238,000	5.98	0.588	4.51	1,010	1.43	74	516,000	64.4	5.4	2.58	<2.0	4,350,000	0.130	35.7	1.79	3.27	7.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Oct-11	---													Well Not Sampled												
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	8-Dec-11	D	8.7	<0.50	<2.0	14.5	<0.50	1,410	0.220	155,000	3.13	0.273	1.63	<10	<0.30	70	404,000	736	30.8	6.02	<2.0	3,300,000	0.334	<5.0	2.30	1.58	388
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-12	D	10.1	<0.50	<2.0	13.7	<0.50	1,340	0.188	143,000	<0.50	0.050	1.26	<10	<0.30	59	369,000	74.3	24.8	1.99	<2.0	2,890,000	0.287	<5.0	2.39	1.7	89.0
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	6-Jun-12	D	6.2	<0.50	<2.0	10.4	<0.50	1,580	0.268	164,000	<0.50	0.230	1.91	<10	<0.30	77	421,000	1,620	52.8	3.20	<2.0	3,110,000	0.339	<5.0	2.61	1.19	30.1
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	13-Sep-12	D	50.5	<0.50	<2.0	11.3	<0.50	1,840	0.295	174,000	<0.50	0.166	1.59	69	<0.30	86	437,000	1,260	52.7	8.04	<2.0	3,220,000	0.423	<5.0	2.57	1.40	41.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Dec-12	D	<5.0	<0.50	<2.0	15.4	<0.50	1,680	<0.050	184,000	<0.50	0.051	2.02	<10	<0.30	71	445,000	24.3	19.0	2.39	<2.0	3,360,000	0.139	<5.0	2.76	0.86	57.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-13	D	6.1	<0.50	<2.0	7.2	<0.50	780	0.075	74,000	<0.50	0.202	2.02	<10	0.83	29	184,000	444	14.7	1.50	<2.0	1,440,000	0.079	<5.0	1.24	0.75	43.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	18-Jun-13	D	<5.0	<0.50	<2.0	16.8	<0.50	1,620	<0.050	166,000	<0.50	0.124	1.44	<10	<0.30	78	397,000	126	23.5	1.28	<2.0	3,140,000	0.228	<5.0	2.68	0.98	11.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	19-Sep-13	D	<5.0	<0.50	<2.0	20.6	<0.50	1,740	<0.060	199,000	<0.50	0.170	1.17	<10	<0.30	72	492,000	277	24.8	2.70	<2.0	3,780,000	0.270	<5.0	2.92	0.99	26.1
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	12-Dec-13	D	8.1	<0.50	<2.0	14.0	<0.50	1,600	<0.050	217,000	<0.50	0.277	0.94	<10	<0.30	64	478,000	723	22.2	2.75	<2.0	3,510,000	0.139	<5.0	2.92	1.02	7.4
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-14	D	11.0	<0.50	<2.0	19.8	<0.50	1,360	<0.050	212,000	<0.50	0.343	1.24	23	<0.30	58	518,000	2,480	20.4	2.73	<2.0	3,400,000	0.133	<5.0	2.73	0.60	10.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-14	D	<5.0	<0.50	2.2	13.8	<0.50	1,660	0.082	185,000	<0.50	0.082	1.18	<10	<0.30	68	449,000	1,090	23.1	2.17	<2.0	3,510,000	0.173	<5.0	2.73	1.12	8.0
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Sep-14	D	<5.0	<0.50	<2.0	18.8	<0.50	1,800	<0.050	201,000	<0.50	0.117	0.58	15	<0.30	73	481,000	588	14.7	0.80	<2.0	3,730,000	0.117	<5.0	2.81	0.70	<3.0
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	1-Dec-14	D	<5.0	<0.50	<2.0	8.3	<0.50	1,530	<0.050	100,000	3.03	0.054	1.57	<10	<0.30	42	256,000	325	7.3	1.91	<2.0	2,230,000	0.092	<5.0	0.822	0.69	8.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Mar-15	D	<5.0	<0.50	<2.0	16.8	<0.50	1,380	<0.050	155,000	<0.50	<0.050	1.08	<10	<0.30	36	367,000	41.9	11.8	0.70	<2.0	3,050,000	0.083	<5.0	2.65	<0.50	9.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-Jun-15	D	<5.0	<0.50	<2.0	11.8	<0.50	1,640	<0.050	175,000	<0.50	<0.050	0.56	<10	<0.30	44	405,000	268	13.1	0.73	<2.0	3,110,000	0.202	<5.0	2.26	0.52	4.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-15	D	<5.0	<0.50	<2.0	15.7	<0.50	1,610	0.056	213,000	<0.50	0.057	0.75	15	<0.30	67	497,000	323	10.8	0.61	<2.0	3,300,000	0.247	<5.0	2.23	0.61	13.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	10-Dec-15	D	<5.0	<0.50	<2.0	15.4	<0.50	1,580	<0.050	208,000	<0.50	<0.050	<0.50	<10	<0.30	82	511,000	50.9	6.3	1.40	<2.0	3,220,000	<0.050	<5.0	2.70	0.56	4.7
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-16	D	<5.0	<0.50	<2.0	15.3	<0.50	1,930	0.097	232,000	<0.50	<0.050	1.19	<10	<0.30	74	604,000	74.4	6.3	<0.50	<2.0	4,790,000	0.108	<5.0	2.54	0.8	8.3
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	D	<5.0	<0.50	<2.0	16.7	<0.50	1,730	0.060	197,000	<0.50	<0.050	1.16	10.0	<0.30	67	496,000	67.1	8.6	0.53	<2.0	3,780,000	0.092	<5.0	2.64	0.86	8.9
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	D	<5.0	<0.50	<2.0	23.0	<0.50	1,890	<0.050	240,000	<0.50	0.101	<0.50	34	<0.30	78	587,000	67.0	8.9	0.77	<2.0	4,230,000	<0.050	<5.0	2.90	1.24	5.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	25-Nov-16	D	<5.0	<0.50	<2.0	20.5	<0.50	1,700	0.065	237,000	<0.50	<0.050	0.62	<10	<0.30	71	563,000	10.2	8.0	<0.50	<2.0	3,990,000	0.089	<5.0	2.66	<0.50	5.3
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	15-Mar-17	D	<5.0	<0.50	<2.0	21.7	<0.50	1,360	<0.050	193,000	<0.50	<0.050	0.61	<10	<0.30	55	456,000	16.7	6.5	<0.50	<2.0	3,330,000	<0.050	<5.0	2.12	<0.50	3.5
P3-12D	Porewater	P3-12	DS	WB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	D	<5.0	<0.50	<2.0	17.6	<0.50	1,520	<0.050	193,000	<0.50	<0.050	0.68	<10	<0.30	59	473,000	51.4	7.1	<0.50	<2.0	3,370,000	0.064	<5.0	2.79	0.54	<3.0
P3.5-7S-R	Porewater EAZ	P3.5-7R	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Sep-12	---													Well Destroyed												
P3.5-7S	Porewater EAZ	P3.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	6-Oct-11	D	<5.0	<0.50	<2.0	52.5	<0.50	2,410	0.164	270,000	<0.50	<0.050	1.38	<10	<0.30	89	726,000	1.69	5.8	6.15	<2.0	6,160,000	0.057	<5.0	2.26	<0.50	14.1
P3.5-7S	Porewater EAZ	P3.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	5-Nov-11	D	7.9	<0.50	<2.0	45.7	<0.50	1,940	0.244	282,000	<0.50	0.098	1.59	<10	<0.30	86	718,000	8.14	4.3	5.92	<2.0	5,780,000	0.076	<5.0	1.83	0.55	579
P3.5-7S	Porewater EAZ	P3.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	8-Dec-11	D	<5.0	<0.50	<2.0	38.0	<0.50	2,040	0.126	223,000	<0.50	<0.050	0.53	<10	<0.30	79	576,000	0.82	4.4	1.90	<2.0	4,880,000	<0.050	<5.0	1.56	<0.50	22.3
P3.5-7S	Porewater EAZ	P3.5-7	CS	WB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-12	D	7.9	<0.50	<2.0	28.6	<0.50	2,030	<0.050	186,000	<0.50	<0.050	0.81	<10	<0.30	77	500,000	2.46	4.2	3.26	<2.0	4,210,000	<0.050	<5.0	1.22	0.53	7.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Oct-11	D	<5.0	<0.50	<2.0	94.1	<0.50	870	<0.050	181,000	<0.50	<0.050	1.22	<10	0.84	28	313,000	3.45	9.9	12.8	<2.0	2,070,000	<0.050	<5.0	4.76	0.79	75.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-12	D	<5.0	<0.50	<2.0	68.4	<0.50	510	<0.050	131,000	<0.50	<0.050	<0.50	<10	<0.30	<20	222,000	2.48	6.9	1.05	<2.0	1,210,000	<0.050	<5.0	4.03	1.00	3.5
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	D	<5.0	<0.50	<2.0	59.0	<0.50	460	0.087	126,000	<0.50	0.050	1.52	<10	<0.30	<20	215,000	567	9.7	2.16	<2.0	1,070,000	<0.050	<5.0	4.19	<0.50	64.5
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	93.5	<0.50	590	<0.050	153,000	<0.50	0.052	0.64	<10	<0.30	20	253,000	892	5.2	0.76	<2.0	1,230,000	<0.050	<5.0	5.90	<0.50	14.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	<2.0	12.1	<0.50	5,300	<0.050	338,000	<0.50	0.098	0.72	<10	<0.30	206	936,000	175	10.1	<0.50	<2.0	8,240,000	<0.050	<5.0	2.57	1.14	3.8
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	D	14.0	0.76	15.8	182	<0.50	2,140	<0.050	387,000	<0.50	0.542	<0.50	17	<0.30	72	881,000	13,500	<2.0	2.24	<26	6,790,000	<0.050	<5.0	3.95	0.90	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-13	D	6.9	<0.50	2.1	113	<0.50	2,020	<0.050	281,000	<0.50	0.147	<0.50	53	<0.30	85	670,000	10,500	5.9	1.58	<2.0	5,060,000	<0.050	<5.0	2.23	0.74	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Jun-13	D	6.5	<0.50	<2.0	145	<0.50	1,360	<0.050	249,000	<0.50	0.159	<0.50	61	<0.30	37	476,000	17,900	<2.0	0.70	<2.0	2,770,000	<0.050	<5.0	0.821	<0.50	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Sep-13	D	20.2	<0.50	<2.0	114	<0.50	2,550	<0.050	319,000	<0.50	0.097	<0.50	46	<0.30	88	747,000	7,930	<2.0	<0.50	2.6	5,510,000	<0.050	<5.0	0.538	0.59	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	94.7	<0.50	2,380	<0.050	269,000	<0.50	0.148	<0.50	75	<0.30	73	686,000	9,590	6.3	2.98	<2.0	4,840,000	<0.050	<5.0	1.86	0.56	4.8
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	D	<5.0	<0.50	<2.0	102	<0.50	1,750	<0.050	264,000	<0.50	0.223	<0.50	201	<0.30	50.0	586,000	10,800	6.6	1.54	<2.0	3,920,000	<0.050	<5.0	1.74	<0.50	4.9
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Jun-14	D	7.3	<0.50	2.3	63.1	<0.50	2,610	0.051	267,000	<0.50	0.113	2.05	87	<0.30	96	729,000	5,590	2.8	<0.50	<2.0	5,770,000	<0.050	<5.0	0.900	<0.50	3.3
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	113	<0.50	1,290	<0.050	249,000	<0.50	0.067	<0.50	138	<0.30	32	450,000	16,500	<2.0	0.65	<2.0	2,680,000	0.051	<5.0	0.396	<0.50	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	4-Dec-14	D	<5.0	<0.50	<2.0	78.5	<0.50	1,180	<0.050	246,000	<0.50	<0.050	<0.50	31	<0.30	32	477,000	2,950	2.3	1.33	<2.0	2,860,000	<0.050	<5.0	1.78	<0.50	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-15	D	5.2	<0.50	<2.0	89.9	<0.50	770	<0.050	234,000	<0.50	0.164	0.89	32	<0.30	<20	400,000	4,230	28.3	0.96	<2.0	2,060,000	<0.050	<5.0	2.25	<0.50	7.70
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Jun-15	D	<5.0	<0.50	<2.0	88.3	<0.50	1,360	<0.050	268,000	<0.50	0.086	0.51	37	<0.30	42	545,000	3,400	6.2	0.93	<2.0	3,720,000	<0.050	<5.0	2.89	<0.50	9.7
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	151	<0.50	890	<0.050	253,000	<0.50	0.076	<0.50	50.0	<0.30	21	440,000	18,200	<2.0	<0.50	<2.0	1,960,000	<0.050	<5.0	1.02	<0.50	9.5
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Dec-15	D	<5.0	<0.50	<2.0	87.9	<0.50	880	<0.050	271,000	<0.50	0.128	<0.50	29	<0.30	35	435,000	7,970	13.0	0.73	<2.0	2,330,000	<0.050	<5.0	4.02	<0.50	8.1
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	66.4	<0.50	720	<0.050	285,000	<0.50	<0.050	1.15	<10	<0.30	<20	460,000	24.2	<2.0	<0.50	<2.0	2,010,000	<0.050	<5.0	2.32	<0.50	4.7
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	66.0	<0.50	1,170	<0.050	301,000	<0.50	<0.050	<0.50	<10	<0.30	39	538,000	8,160	4.4	<0.50	<2.0	3,010,000	<0.050	<5.0	1.27	<0.50	5.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	17-Aug-16	D	<5.0	<0.50	2.0	177	<0.50	850	<0.050	326,000	<0.50	0.288	<0.50	562	<0.30	<20	518,000	14,800	57.1	0.57	<2.0	2,250,000	<0.050	<5.0	9.24	<0.50	<3.0
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	22-Nov-16	D	5.9	<0.50	<2.0	73.1	<0.50	850	<0.050	310,000	<0.50	<0.050	<0.50	32	<0.30	29	531,000	13,100	3.0	<0.50	<2.0	2,630,000	<0.050	<5.0	1.38	<0.50	3.3
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	127	<0.50	1,870	<0.050	331,000	<0.50	<0.050	0.94	<10	<0.30	86	686,000	295	<2.0	<0.50	<2.0	4,740,000	<0.050	<5.0	3.02	<0.50	5.5
P3.5-7I	Porewater	P3.5-7	CS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	90.0	<0.50	1,190	<0.050	344,000	<0.50	<0.050	0.52	<10	<0.30	38	637,000	1,830	<2.0	<0.50	<2.0	3,200,000	<0.050	<5.0	1.59	<0.50	3.1
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Oct-11	D	<5.0	<0.50	<2.0	170	<0.50	560	<0.050	150,000	<0.50	0.495	0.56	<10	<0.30	<20	206,000	1,010	4.7	1.6	<2.0	1,360,000	<0.050	<5.0	2.7	<0.50	112
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	D	<5.0	<0.50	<2.0	173 J	<0.50	560	0.057	152,000	1.57 J	0.074 J	1.32 J	<10	<0.30	<20	221,000	130 J	3.3	1.72 J	<2.0	1,410,000	<0.050	<5.0	2.27	<0.50	58.3
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12	D	<5.0	<0.50	<2.0	192	<0.50	710	<0.050	175,000	<0.50	<0.050	0.59	<10	<0.30	<20	273,000	11.0	2.7	<0.50	<2.0	1,670,000	<0.050	<5.0	2.45	0.53	16.8
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	6-Jun-12	D	<5.0	<0.50	<2.0	181	<0.50	560	0.060	170,000	<0.50	0.259	1.05	15	<0.30	<20	252,000	455	2.7	0.59	<2.0	1,390,000	<0.050	<5.0	2.16	<0.50	28.6
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	192	<0.50	600	<0.050	195,000	<0.50	0.274	<0.50	<10	<0.30	<20	274,000	400	<2.0	1.33 J	<2.0	1,400,000	<0.050	<5.0	2.19	<0.50	21.5
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	223	<0.50	570	<0.050	196,000	<0.50	2.31	2.98	30	<0.30	<20	282,000	4,850	2.9	1.95	<2.0	1,390,000	<0.050	<5.0	1.44	<0.50	34.1
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	165	<0.50	630	<0.050 UJ	174,000	<0.50	0.733 J	<0.50	52 J	<0.30	<20	260,000	1,210 J	<2.0	3.13 J	<2.0	1,410,000	<0.050	<5.0	1.48	<0.50	18.3
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	164	<0.50	510	<0.050	190,000	<0.50	0.282	0.90	19	<0.30	<20	280,000	1,040	<2.0	1.40	<2.0	1,270,000	<0.050	<5.0	1.41	<0.50	24.9
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	17-Sep-13	D	<5.0	<0.50	<2.0	166	<0.50	620	<0.050	182,000	<0.50	0.316	1.34	19	<0.30	<20	271,000	707	<2.0	1.84	<2.0	1,420,000	<0.050	<5.0	1.34	<0.50	33.8
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	183	<0.50	600	<0.050	216,000	<0.50	0.114	0.52	<10	<0.30	<20	316,000	0.83	<2.0	1.12	<2.0	1,600,000	<0.050	<5.0	1.86	<0.50	11.6
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	170	<0.50	550	<0.050	203,000	65.5	0.429	0.92	498	<0.30	<20	306,000	636	<2.0	6.05	<2.0	1,450,000	<0.050	<5.0	1.43	<0.50	8.3
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	167	<0.50	570	<0.050	208,000	<0.50	1.08	1.46	163	<0.30	<20	308,000	2,590	<2.0	2.41	<2.0	1,460,000	<0.050	<5.0	1.39	<0.50	10.2
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	172	<0.50	490	<0.050	213,000	<0.50	0.178	1.35	14	<0.30	<20	314,000	444	<2.0	1.13	<2.0	1,550,000	<0.050	<5.0	1.67	<0.50	9.9
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	141	<0.50	690	<0.050	199,000	<0.50	0.259	2.69	44	<0.30	<20	280,000	764	<2.0	2.25	<2.0	1,370,000	<0.050	<5.0	1.52	<0.50	7.8
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	11-Mar-15	D	<5.0	<0.50	<2.0	145	<0.50	520	<0.050	196,000	<0.50	0.180	2.33	26	<0.30	<20	274,000	393	<2.0	1.12	<2.0	1,500,000	<0.050	<5.0	1.54	<0.50	10.1
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	116	<0.50	510	<0.050	211,000	<0.50	0.105	2.88	<10	<0.30	<20	282,000	9.59	<2.0	<0.50	<2.0	1,290,000	<0.050	<5.0	1.50	<0.50	10.2
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	108	<0.50	500	<0.050	217,000	<0.50	0.294	2.11	22	<0.30	<20	312,000	3,640	3.3	4.38	<2.0	1,320,000	<0.050	<5.0	1.15	<0.50	15.4
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	120	<0.50	530	<0.050	205,000	<0.50	0.130	2.63	11	<0.30	<20	284,000	146	<2.0	0.64	<2.0	1,370,000	<0.050	<5.0	1.96	<0.50	11.7
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	127	<0.50	560	<0.050	221,000	<0.50	0.137	1.41	<10	<0.30	<20	298,000	64.8	<2.0	<0.50	<2.0	1,280,000	<0.050	<5.0	2.16	<0.50	6.4
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	115	<0.50	530	<0.050	242,000	<0.50	0.295	0.81	28	<0.30	<20	339,000	916	<2.0	0.76	<2.0	1,450,000	<0.050	<5.0	1.70	<0.50	7.0
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	16-Aug-16	D	<5.0	<0.50	<2.0	126	<0.50	780	<0.050	241,000	<0.50	0.056	0.94	<10	<0.30	25	378,000	94.2	<2.0	0.57	<2.0	1,990,000	<0.050	<5.0	1.80	<0.50	5.4
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	22-Nov-16	D	6.3	<0.50	<2.0	143	<0.50	670	<0.050	236,000	<0.50	0.192	2.52	26	<0.30	24	346,000	207	<2.0	0.54	<2.0	1,790,000	<0.050	<5.0	1.88	<0.50	12.3
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	143	<0.50	590	<0.050	252,000	<0.50	0.154	1.91	<10	<0.30	<20	361,000	15.9	<2.0	<0.50	<2.0	1,770,000	<0.050	<5.0	2.19	<0.50	6.8
P3.5-7D	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	98.4	<0.50	540	<0.050	226,000	<0.50	0.108	2.33	<10	<0.30	21	326,000	12.5	<2.0	0.56	<2.0	1,600,000	<0.050	<5.0	1.39	<0.50	33.2
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	D	<5.0	1.09	<2.0	275	<0.50	1,230	0.218	115,000	<0.50	3.36	0.71	<10	<0.30	44	177,000	771	23.0	6.41	<2.0	2,110,000	0.131	<5.0	3.53	<0.50	<3.0
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	D	<5.0	0.51	<2.0	114	<0.50	2,710	0.523	190,000	<0.50	0.303	1.50	<10	<0.30	103	518,000	23.8	11.3	3.14	<2.0	4,830,000	0.165	<5.0	2.86	0.77	3.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	T	1,960	0.61	<2.0	136	<0.50	2,630	0.484	195,000	1.77	1.02	3.35	2,490	0.60	100	519,000	59.7	10.7	3.40	<2.0	4,820,000	0.150	77.3	2.85	7.18	6.2
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Sep-13	D	7.4	<0.50	<2.0	92.4	<0.50	2,600	0.481	252,000	<0.50	0.339	1.40	<10	<0.30	106	697,000	7.79	8.2	2.61	<2.0	5,430,000	0.087	<5.0	3.07	0.87	7.8
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Sep-13	T	2,930	<0.50	<3.0	132	<0.50	2,550	0.491	260,000	2.06	1.84	3.73	3,130	0.70	110	714,000	71.4	8.7	7.38	<2.0	5,580,000	0.109	77.3	3.51	8.42	8.1
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	59.9	<0.50	2,360	0.512	288,000	<0.50	0.133	1.75	<10	<0.30	104	727,000	3.47	7.4	1.79 J	<2.0	5,740,000	0.076	<5.0	3.74	0.72	7.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	T	37,400	<0.50	11.7	662	1.28	2,310	0.819	297,000	37.6	22.4	62.6	58,500	12.7	135	740,000	1,320	7.5	20.2	<2.0	5,760,000	0.228	996	5.59	146	113
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	52.0	<0.50	2,700	0.341	242,000	<0.50	0.083	1.34	<10	<0.30	103	675,000	1.71	7.3	1.22	<2.0	5,630,000	<0.050	<5.0	3.52	0.64	4.6
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-14	T	2,890	<0.50	<2.0	85.7	<0.50	2,480	0.295	230,000	2.19	1.25	4.7	3,870	0.91	96	647,000	76.3	6.7	2.13	<2.0	5,420,000	<0.050	106	3.48	10.2	11.1
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	55.8	<0.50	3,400	0.298	227,000	2.16	<0.050	2.27	24	0.46	123	646,000	2.92	8.4	1.08	<2.0	5,620,000	0.053	<5.0	3.37	0.89	4.6
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Jun-14	T	9,080	<0.50	6.4	91.5	0.85	3,310	0.682	235,000	12.7	16.1	31.4	17,100	8.74	129	649,000	868	5.5	9.56	<2.0	5,750,000	0.068	50.5	3.78	52.1	47.6
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	56.8	<0.50	2,790	0.322	265,000	<0.50	<0.050	1.04	<10	<0.30	122	754,000	0.99	6.5	1.07	<2.0	6,470,000	0.079	<5.0	3.02	0.79	3.9
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	T	13,200	<0.50	3.9	273	<0.50	2,730	0.327	266,000	10.1	6.94	20	18,500	4.08	129	743,000	410	6.2	6.64	<2.0	6,500,000	0.109	477	3.17	48.4	38.3
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	35.4	<0.50	2,480	0.117	193,000	<0.50	<0.050	1.10	<10	<0.30	93	523,000	0.33	6.7	1.85	<2.0	4,930,000	<0.050	<5.0	2.28	0.77	4.2
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	T	567	<0.50	<2.0	41.3	<0.50	2,480	0.126	188,000	1.56	0.394	1.63	885	<0.30	93	515,000	21.5	6.4	2.03	<2.0	4,760,000	<0.050	27.3	2.21	3.14	3.4
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	D	<5.0	<0.50	<2.0	38.4	<0.50	2,360	0.121	247,000	<0.50	<0.050	1.15	<10	<0.30	63	707,000	0.51	6.1	0.76	<2.0	5,720,000	<0.050	<5.0	2.56	0.62	6.1
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	T	8,090	<0.50	4.1	205	<0.50	2,350	0.252	268,000	8.62	5.07	15.3	13,100	3.01	65	764,000	340	6.3	4.88	<2.0	6,120,000	0.065	349	2.93	32.9	26.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	D	6.5	<0.50	<2.0	40.5	<0.50	2,860	0.287	257,000	<0.50	<0.050	0.95	<10	<0.30	87	690,000	0.43	5.8	0.57	<2.0	5,940,000	<0.050	<5.0	2.51	0.74	5.7
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	T	15,500	<0.50	7.7	299	0.56	2,850	0.457	260,000	14.6	9.17	23.4	25,800	5.74	91	683,000	672	5.6	8.40	<2.0	5,960,000	<0.050	572	3.11	62	48.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	37.4	<0.50	2,840	0.217	264,000	<0.50	<0.050	1.36	<10	<0.30	110	810,000	1.26	6.9	2.95	<2.0	6,350,000	<0.050	<5.0	2.29	0.73	6.2
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	T	3,600	1.20	<2.0	86.2	<0.50	2,880	0.218	264,000	3.28	2.19	7.28	5,720	1.31	113	774,000	129	6.6	4.25	<2.0	6,920,000	<0.050	148	2.23	14.5	16.1
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	35.4	<0.50	2,550	0.130	230,000	<0.50	0.062	0.68	<10	<0.30	75	665,000	1.13	6.3	0.55	<2.0	5,590,000	<0.050	<5.0	2.04	0.66	5.6
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	T	8,720	0.60	2.5	135	<0.50	2,440	0.138	230,000	5.76	3.72	11.5	10,500	1.60	76	673,000	246	6.7	3.95	<2.0	5,530,000	<0.050	256	2.27	23.7	22.3
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-16	D	<5.0	<0.50	<2.0	23.7	<0.50	2,360	0.130	189,000	<0.50	<0.050	1.77	<10	<0.30	83	561,000	0.90	6.0	0.51	<2.0	4,990,000	<0.050	<5.0	1.93	0.66	11.8
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-16	T	840	<0.50	<2.0	31.5	<0.50	2,290	0.138	175,000	0.90	0.594	2.43	1,250	0.35	78	501,000	30.9	5.8	0.95	<2.0	4,720,000	<0.050	36.5	1.93	3.43	6.7
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-May-16	D	<5.0	<0.50	<2.0	36.9	<0.50	3,220	0.271	244,000	<0.50	<0.050	1.48	<10	<0.30	111	747,000	0.42	6.9	0.92	<2.0	6,000,000	<0.050	<5.0	2.65	0.80	8.3
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-May-16	T	1,070	0.54	<2.0	47.5	<0.50	2,970	0.283	243,000	1.02	0.770	3.02	1,530	0.44	106	721,000	37.5	6.6	2.01	<2.0	6,000,000	<0.050	45.8	2.68	4.28	7.4
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	D	5.7	<0.50	<2.0	31.0	<0.50	3,050	0.253	268,000	<0.50	<0.050	1.47	13	<0.30	121	742,000	3.71	6.8	1.38	<2.0	6,420,000	<0.050	<5.0	2.73	0.92	8.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	T	9,080	1.30	4.1	169	<0.50	3,020	0.253	260,000	7.97	5.83	17.3	14,200	3.91	119	720,000	339	7.1	6.47	<2.0	6,160,000	0.059	395	2.84	31.0	32.4
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	25-Nov-16	D	<5.0	<0.50	<2.0	26.4	<0.50	2,780	0.130	241,000	<0.50	<0.050	0.87	<10	<0.30	105	719,000	0.23	6.6	0.86	<2.0	6,190,000	<0.050	<5.0	2.15	0.59	5.0
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	25-Nov-16	T	614	<0.50	<2.0	32.4	<0.50	2,780	0.160	243,000	1.00	0.620	2.24	1,010	1.29	107	723,000	28.8	6.8	1.72	<2.0	5,590,000	<0.050	34.7	2.16	2.64	9.7
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	D	33.3	<0.50	<2.0	32.0	<0.50	2,460	0.116	235,000	<0.50	<0.050	1.26	77	<0.30	101	687,000	2.47	6.3	0.76	<2.0	5,530,000	<0.050	<5.0	2.68	0.82	<3.0
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	T	643	<0.50	<2.0	36.3	<0.50	2,450	0.172	253,000	0.69	0.392	1.86	927	0.35	106	720,000	22.4	6.7	0.7	<2.0	5,800,000	<0.050	24.4	2.97	2.87	4.1
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	26.6	<0.50	2,460	0.126	216,000	<0.50	0.062	3.56	<10	<0.30	103	642,000	3.32	5.9	<0.50	<2.0	5,460,000	<0.050	<5.0	2.30	0.84	3.5
P3.5-12S	Porewater EAZ	P3.5-12	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	T	6,960	<0.50	3.9	116	<0.50	2,740	0.161	218,000	6.75	4.79	13.2	10,500	3.37	113	614,000	239	6.2	4.24	<2.0	5,500,000	0.061	301	2.87	25.4	25.4
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	27-Mar-13	D	<5.0	<0.50	<2.0	127	<0.50	590	<0.050	100,000	<0.50	0.865	<0.50	531	<0.30	<20	188,000	650	4.7	0.70	<2.0	1,300,000	<0.050	<5.0	0.329	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	99.8	<0.50	670	<0.050	98,100	<0.50	0.315	0.57	357	<0.30	<20	189,000	693	3.7	0.53	<2.0	1,250,000	<0.050	<5.0	0.227	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	D	79.6	<0.50	<2.0	74.4	<0.50	580	<0.050	130,000	<0.50	0.168	0.63	638	<0.30	<20	241,000	560	2.2	<0.50	<2.0	1,580,000	<0.050	<5.0	0.103	<0.50	3.9
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	67.0	<0.50	660	<0.050	132,000	<0.50	0.275	<0.50	86	<0.30	<20	242,000	304	3.4	0.65	<2.0	1,700,000	<0.050	<5.0	0.287	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	85.0	<0.50	680	<0.050	136,000	<0.50	0.209	<0.50	311	<0.30	<20	257,000	483	2.3	<0.50	<2.0	1,620,000	<0.050	<5.0	0.145	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	97.8	<0.50	780	<0.050	136,000	<0.50	0.169	0.66	220	<0.30	22	285,000	575	<2.0	<0.50	<2.0	1,760,000	<0.050	<5.0	0.170	<0.50	4.4
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	85.3	<0.50	760	<0.050	119,000	<0.50	0.198	<0.50	369	<0.30	<20	231,000	546	<2.0	<0.50	<2.0	1,580,000	0.051	<5.0	0.166	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	107	<0.50	1,090	<0.050	166,000	<0.50	0.293	0.51	310	<0.30	21	328,000	729	2.2	1.01	<2.0	2,110,000	<0.050	<5.0	0.215	<0.50	3.1
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	D	5.5	<0.50	<2.0	120	<0.50	790	<0.050	171,000	<0.50	0.141	<0.50	365	<0.30	<20	337,000	629	<2.0	<0.50	<2.0	2,140,000	<0.050	<5.0	0.103	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	58.5	<0.50	640	<0.050	117,000	<0.50	<0.050	<0.50	13	<0.30	<20	205,000	30.7	<2.0	<0.50	<2.0	1,460,000	<0.050	<5.0	0.093	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	61.5	<0.50	680	<0.050	108,000	<0.50	<0.050	0.68	97	<0.30	<20	216,000	200	<2.0	<0.50	<2.0	1,300,000	<0.050	<5.0	0.090	<0.50	8.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	60.6	<0.50	590	<0.050	107,000	<0.50	<0.050	0.88	17	<0.30	<20	194,000	2.73	<2.0	<0.50	<2.0	1,260,000	<0.050	<5.0	0.076	<0.50	7.6
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-16	D	<5.0	<0.50	<2.0	54.9	<0.50	590	<0.050	118,000	<0.50	<0.050	<0.50	42	<0.30	<20	220,000	5.59	<2.0	<0.50	<2.0	1,560,000	<0.050	<5.0	0.105	<0.50	20.5
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	18-May-16	D	<5.0	<0.50	<2.0	74.2	<0.50	740	<0.050	159,000	<0.50	0.128	<0.50	348	<0.30	21	282,000	739	<2.0	<0.50	<2.0	1,730,000	<0.050	<5.0	0.126	<0.50	11.1
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Aug-16	D	<5.0	<0.50	<2.0	77.9	<0.50	880	<0.050	158,000	<0.50	0.251	<0.50	497	<0.30	21	310,000	631	<2.0	<0.50	<2.0	1,880,000	<0.050	<5.0	0.134	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	25-Nov-16	D	9.0	<0.50	<2.0	93.7	<0.50	800	<0.050	205,000	<0.50	0.235	<0.50	958	<0.30	27	414,000	846	<2.0	<0.50	<2.0	2,490,000	<0.050	<5.0	0.109	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-17	D	24.3	<0.50	<2.0	104	<0.50	770	<0.050	198,000	<0.50	0.378	<0.50	805	<0.30	28	392,000	776	<2.0	<0.50	<2.0	2,340,000	<0.050	<5.0	0.121	<0.50	<3.0
P3.5-12I	Porewater	P3.5-12	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	61.3	<0.50	510	<0.050	123,000	<0.50	<0.050	3.60	120	<0.30	<20	224,000	11.6	<2.0	<0.50	<2.0	1,460,000	<0.050	<5.0	0.097	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	27-Mar-13	D	<5.0	<0.50	<2.0	289	<0.50	680	<0.050	142,000	<0.50	3.56	<0.50	444	<0.30	23	255,000	1,210	5.0	2.92	<2.0	1,650,000	<0.050	<5.0	0.744	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	D	<5.0	<0.50	2.0	222	<0.50	940	<0.050	145,000	<0.50	1.28	<0.50	1,090	<0.30	29	309,000	976	2.7	0.94	<2.0	2,060,000	<0.050	<5.0	0.276	<0.50	3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	D	<5.0	<0.50	2.2	215	<0.50	1,010	<0.050	149,000	<0.50	1.28	0.53	1,020	<0.30	24	308,000	941	2.9	0.98	<2.0	2,120,000	<0.050	<5.0	0.337	<0.50	5.8
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	120	<0.50	890	<0.050	211,000	<0.50	1.10	<0.50	1,240	<0.30	24	438,000	626	4.1	0.87	<2.0	2,670,000	<0.050	<5.0	0.178	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	126	<0.50	1,380	<0.050	225,000	<0.50 UJ	1.65	<0.50 UJ	1,440	<0.30	40.0	499,000	644	3.7	1.32 J	<2.0	3,120,000	<0.050	<5.0	0.151	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	149	<0.50	960	<0.050	175,000	<0.50	0.784	0.93	21	<0.30	32	390,000	261	3.9	0.93	<2.0	2,500,000	<0.050	<5.0	0.250	<0.50	5.7
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	163	<0.50	1,580	<0.050	251,000	<0.50	2.14	<0.50	2,060	<0.30	44	569,000	1,030	3.1	1.39	<2.0	3,750,000	<0.050	<5.0	0.222	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	108	<0.50	2,270	<0.050	290,000	0.53	0.268	0.61 J	30.0	<0.30	85	713,000	43.2	7.0	4.21	<2.0	5,270,000	0.064	<5.0	0.880	<0.50	4.2
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	D	9.1	<0.50	<2.0	61.8	<0.50	3,100	0.207	343,000	<0.50	0.501	1.35	12	<0.30	84	966,000	19.4	9.9	3.88	<2.0	8,270,000	0.087	<5.0	1.82	0.57	9.3
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	88.2	<0.50	2,130	0.199	292,000	<0.50	0.167	0.56	<10	<0.30	63	689,000	6.10	6.3	2.70	<2.0	5,210,000	<0.050	<5.0	1.03	<0.50	3.7
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	97.6	<0.50	1,680	0.124	253,000	<0.50	0.051	<0.50	<10	<0.30	60.0	640,000	1.79	5.8	2.56	<2.0	4,280,000	<0.050	<5.0	0.671	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	123	<0.50	1,650	0.156	290,000	<0.50	0.230	0.75	<10	<0.30	48	640,000	20.2	7.3	3.08	<2.0	4,300,000	0.058	<5.0	0.493	<0.50	8.2
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-16	D	<5.0	<0.50	<2.0	94.4	<0.50	1,540	0.286	252,000	<0.50	<0.050	0.79	<10	<0.30	49	587,000	0.70	6.4	2.27	<2.0	3,940,000	0.093	<5.0	0.504	<0.50	7.3
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	18-May-16	D	<5.0	<0.50	<2.0	98.6	<0.50	1,630	0.169	288,000	<0.50	1.32	0.96	<10	<0.30	58	650,000	461	5.5	6.06	<2.0	4,070,000	0.052	<5.0	0.359	<0.50	8.6
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Aug-16	D	<5.0	<0.50	5.3	89.8	<0.50	1,800	<0.050	257,000	<0.50	6.47	<0.50	818	<0.30	52	622,000	1,390	4.3	4.40	<2.0	4,110,000	<0.050	<5.0	0.305	<0.50	<3.0
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	25-Nov-16	D	<5.0	<0.50	<2.0	84.9	<0.50	1,570	0.214	261,000	<0.50	0.264	2.53	<10	<0.30	54	612,000	101	4.6	3.05	<2.0	4,090,000	<0.050	<5.0	0.335	<0.50	5.2
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-17	D	<5.0	<0.50	<2.0	85.7	<0.50	1,460	0.099	255,000	<0.50	1.51	9.18	64	<0.30	53	601,000	164	4.7	2.88	<2.0	3,900,000	<0.050	<5.0	0.277	<0.50	5.2
P3.5-12D	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	77.1	<0.50	1,450	0.133	259,000	<0.50	0.473	2.23	<10	<0.30	52	650,000	5.14	3.7	1.88	<2.0	4,160,000	0.077	<5.0	0.344	<0.50	5.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	15-Mar-13	D	<5.0	<0.50	<2.0	95.8	<0.50	1,790	0.365	131,000	<0.50	2.90	0.96	31	<0.30	58	308,000	447	7.5	3.68	<2.0	3,020,000	0.068	<5.0	10.8	2.28	6.1
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	20-Mar-13	D	<5.0	<0.50	<2.0	52.5	<0.50	1,570	<0.050	126,000	<0.50	3.05	0.51	44	<0.30	44	334,000	588	6.8	1.95	<2.0	3,220,000	<0.050	<5.0	6.02	1.78	<3.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	28.9	<0.50	1,960	<0.050	117,000	<0.50	1.30	0.51	327	<0.30	51	304,000	356	5.9	3.16	<2.0	3,070,000	<0.050	<5.0	3.09	1.62	5.0 J
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	T	3,410	<0.50	2.8	39.0	<0.50	2,040	0.107	122,000	2.39	2.60	7.18	3,630	1.04	63	309,000	421	6.3	3.87	<2.0	3,190,000	<0.050	145	3.92	11.8	9.3 J
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	53.2	<0.50	2,360	0.083	286,000	<0.50	2.16	0.73	696	<0.30	78	742,000	380	4.8	1.04	<2.0	5,310,000	<0.050	<5.0	3.31	0.92	4.2
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	T	2,710	<0.50	<2.0	56.4	<0.50	2,230	0.420	277,000	1.97	2.82	6.50	3,010	0.81	83	706,000	362	4.8	2.05 J+	<2.0	5,050,000	<0.050	123	3.73	10.6	<7.0 U
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Dec-13	D	<5.0	<0.50	<2.0	37.6	<0.50	1,910	0.729	252,000	<0.50	1.36	1.39	76	<0.30	57	653,000	179	5.2	1.22	<2.0	4,950,000	<0.050	<5.0	4.17	2.11	3.5
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Dec-13	T	2,780	<0.50	2.3	42.5	<0.50	1,830	0.704	241,000	1.97	2.33	7.12	3,700	1.02	63	624,000	192	5.0	2.06	<2.0	4,710,000	<0.050	125	4.46	11.6	7.6
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	D	52.9	<0.50	<2.0	23.0	<0.50	1,890	0.319	144,000	<0.50	0.636	1.20	17	<0.30	43	370,000	107	4.8	0.64	<2.0	3,600,000	<0.050	<5.0	3.10	2.24	4.0

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	T	8,120	<0.50	4.7	40.6	<0.50	1,870	0.253	117,000	4.99	3.50	16.5	9,060	3.04	67	310,000	156	5.8	3.66	<2.0	3,080,000	<0.050	348	5.33	30.0	18.9
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	D	<5.0	<0.50	2.3	22.4	<0.50	2,180	0.260	128,000	<0.50	0.508	1.89	42	<0.30	54	334,000	89.5	5.4	0.98	<2.0	3,620,000	<0.050	<5.0	3.58	3.11	3.7
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	T	4,030	<0.50	4.1	32.1	<0.50	2,180	0.265	130,000	2.85	2.20	8.72	4,420	1.16	65	339,000	141	5.3	2.53	<2.0	3,670,000	<0.050	174	4.40	17.1	8.4
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	46.9	<0.50	2,280	0.221	269,000	<0.50	1.24	1.56	140	<0.30	86	703,000	152	4.7	1.10	<2.0	5,570,000	<0.050	<5.0	4.17	1.63	3.1
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-14	T	32,200	<0.50	16.5	134	0.75	2,260	0.869	295,000	19.3	15.0	58.3	35,600	9.91	242	769,000	586	4.7	12.7	<2.0	6,030,000	0.145	1,030	11.7	104	63.7
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	42.2	<0.50	2,090	0.221	286,000	<0.50	1.36	1.07	26	<0.30	61	709,000	151	4.1	0.82	<2.0	5,340,000	<0.050	<5.0	3.23	1.21	<3.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Dec-14	T	28,900	<0.50	23.2	124	0.87	2,120	0.781	284,000	26.6	15.5	56.9	43,200	8.94	222	716,000	610	4.8	15.6	<2.0	5,500,000	0.109	1,140	11.2	124	64.2
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	D	17.7	<0.50	<2.0	22.1	<0.50	1,910	0.182	153,000	<0.50	0.346	1.57	32	<0.30	35	418,000	34.0	4.9	0.66	<2.0	3,810,000	<0.050	<5.0	3.14	1.62	8.3
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Mar-15	T	2,630	<0.50	3.5	30.0	<0.50	1,900	0.213	153,000	2.28	1.36	5.82	3,660	1.05	41	419,000	72.2	5.0	1.49	<2.0	3,810,000	<0.050	133	3.82	11.5	7.2
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	D	20.1	<0.50	<2.0	27.1	<0.50	2,080	0.273	190,000	<0.50	0.358	1.22	31	<0.30	49	470,000	38.5	5.0	<0.50	<2.0	4,440,000	<0.050	<5.0	2.58	1.58	3.6
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Jun-15	T	16,400	<0.50	14.4	74.8	<0.50	2,070	0.545	200,000	11.1	7.61	27.1	22,700	5.51	100	467,000	293	4.6	6.71	<2.0	4,490,000	<0.050	631	6.72	58.7	32.4
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	50.1	<0.50	2,090	0.321	303,000	<0.50	1.02	2.14	59	<0.30	72	795,000	102	4.1	2.62	<2.0	5,450,000	<0.050	<5.0	2.43	1.46	8.5
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Sep-15	T	3,970	<0.50	4.9	64.2	<0.50	2,190	0.320	312,000	3.24	2.57	9.58	6,500	1.59	86	776,000	151	4.5	4.58	<2.0	5,960,000	<0.050	182	3.77	16.9	12.8
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	52.3	<0.50	2,080	0.349	304,000	<0.50	0.738	1.17	20.0	<0.30	49	754,000	101	4.5	0.69	<2.0	5,600,000	<0.050	<5.0	2.04	1.04	<3.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	T	1,340	<0.50	<2.0	61.4	<0.50	2,120	0.387	320,000	0.91	1.54	2.92	2,020	0.33	54	789,000	151	4.2	1.13	<2.0	5,850,000	<0.050	59.0	2.34	5.76	4.4
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	31.4	<0.50	2,040	0.383	167,000	<0.50	0.636	0.97	103	<0.30	50.0	451,000	52.3	4.6	<0.50	<2.0	3,980,000	<0.050	<5.0	2.35	1.37	13.4
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	1-Mar-16	T	4,710	<0.50	5.9	45.4	<0.50	1,990	0.442	156,000	4.92	3.52	11.7	8,860	2.37	70.0	417,000	121	4.6	3.34	<2.0	3,700,000	<0.050	240	3.81	22.7	15.5
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	24.1	<0.50	2,150	0.270	162,000	<0.50	0.604	1.84	106	<0.30	58	436,000	38.7	4.9	1.16	<2.0	4,310,000	<0.050	<5.0	2.41	2.01	6.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-May-16	T	2,930	<0.50	3.0	29.8	<0.50	2,160	0.222	159,000	1.62	1.98	5.89	4,030	0.97	67	432,000	92.9	5.1	2.03	<2.0	4,260,000	<0.050	117	3.12	11.1	8.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Aug-16	D	<5.0	<0.50	<2.0	40.2	<0.50	2,260	0.300	253,000	<0.50	1.02	2.13	157	<0.30	70.0	697,000	74.3	4.8	0.72	<2.0	5,420,000	<0.050	<5.0	2.64	1.25	3.4
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-Aug-16	T	40,700	<0.50	44.8	193	1.33	2,310	1.06	244,000	37.0	27.0	96.3	72,100	20.0	253	680,000	1,000	5.8	23.2	<2.0	5,080,000	0.215	1,380	14.7	179	112.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	46.9	<0.50	2,110	0.256	290,000	<0.50	0.668	1.00	97	<0.30	68	727,000	44.7	4.5	<0.50	<2.0	5,500,000	<0.050	<5.0	3.00	1.32	7.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	21-Nov-16	T	859	<0.50	2.3	47.8	<0.50	2,020	0.280	284,000	0.63	1.06	2.36	1,900	0.46	66	700,000	50.7	4.5	1.00	<2.0	5,730,000	<0.050	36.3	3.33	4.50	5.2
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	24.1	<0.50	1,750	0.215	141,000	<0.50	0.422	1.02	35	<0.30	50	399,000	30.8	4.9	<0.50	<2.0	4,050,000	<0.050	<5.0	3.23	2.14	<3.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-17	T	3,920	<0.50	5.4	32.6	<0.50	1,740	0.194	149,000	3.40	2.71	8.50	6,600	1.92	65	393,000	123	5.2	2.21	<2.0	3,950,000	<0.050	175	4.41	17.9	10
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	16.5	<0.50	1,940	0.144	105,000	<0.50	0.130	5.04	<10	<0.30	52	303,000	5.59	5.1	<0.50	<2.0	3,140,000	<0.050	<5.0	2.89	3.35	<3.0
P3.8-3S	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	6-Jun-17	T	1,170	<0.50	2.1	21.2	<0.50	2,270	0.183	111,000	2.99	1.04	3.44	1,980	0.98	68	302,000	36.2	5.9	1.09	<2.0	3,470,000	<0.050	53.7	3.69	7.82	3.1
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	298	<0.50	530	6.94	222,000	<0.50	15.0	0.84	<10	<0.30	<20	294,000	1,630	4.6	11.2	<2.0	1,690,000	0.132	<5.0	2.34	<0.50	8.2
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	176	<0.50	780	0.697	149,000	<0.50	5.33	0.55	285	<0.30	<20	235,000	1,820	2.3	4.31	<2.0	1,860,000	<0.050	<5.0	0.774	<0.50	4.3
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	244	<0.50	1,620	1.60	297,000	<0.50	5.72	1.14	109	0.37	<20	629,000	1,800	<2.0	3.87	<2.0	4,360,000	<0.050	<5.0	0.672	<0.50	10.7
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-13	D	<5.0	<0.50	<2.0	129	<0.50	1,290	1.49	305,000	<0.50	3.35	0.68	37	<0.30	<20	608,000	851	2.2	2.67	<2.0	3,960,000	<0.050	<5.0	0.360	<0.50	8.1
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	103	<0.50	770	1.64	174,000	<0.50	2.61	1.16	80.0	<0.30	<20	302,000	552	<2.0	2.68	<2.0	2,060,000	<0.050	<5.0	0.580	<0.50	10.9
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	69.7	<0.50	880	0.963	154,000	<0.50	1.14	0.73	64	<0.30	<20	264,000	405	<2.0	1.89	<2.0	1,990,000	<0.050	<5.0	0.490	<0.50	7.4
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	156	<0.50	1,590	1.07	279,000	<0.50	1.90	0.93	310	<0.30	<20	635,000	605	<2.0	2.49	<2.0	4,590,000	0.052	<5.0	0.321	<0.50	6.9
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	123	<0.50	1,450	1.11	296,000	<0.50	1.11	0.85	77	<0.30	<20	645,000	595	<2.0	2.24	<2.0	4,130,000	<0.050	<5.0	0.323	<0.50	8.9
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	11-Mar-15	D	<5.0	<0.50	<2.0	82.8	<0.50	850	1.70	186,000	<0.50	0.822	1.81	125	<0.30	<20	330,000	355	<2.0	1.86	<2.0	2,370,000	<0.050	<5.0	0.452	<0.50	9.4
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	73.2	<0.50	1,110	0.391	186,000	<0.50	1.02	0.56	1,080	<0.30	<20	325,000	582	<2.0	1.11	<2.0	2,770,000	<0.050	<5.0	0.371	<0.50	3.8
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	146	<0.50	1,530	1.19	332,000	<0.50	1.48	1.13	336	<0.30	<20	775,000	528	<2.0	3.29	<2.0	4,730,000	<0.050	<5.0	0.326	<0.50	15.0
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	102	<0.50	1,480	0.867	327,000	<0.50	0.652	0.72	16	<0.30	<20	660,000	315	<2.0	1.85	<2.0	4,120,000	<0.050	<5.0	0.313	<0.50	18.2
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	70.6	<0.50	1,010	0.615	207,000	<0.50	0.215	1.18	<10	<0.30	<20	371,000	151	<2.0	2.28	<2.0	2,270,000	0.063	<5.0	0.436	<0.50	17.7
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	61.0	<0.50	950	0.846	225,000	<0.50	0.593	0.80	20.0	<0.30	<20	370,000	334	<2.0	1.61	<2.0	2,410,000	<0.050	<5.0	0.438	<0.50	8.2
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	17-Aug-16	D	<5.0	<0.50	<2.0	89.8	<0.50	1,550	0.813	254,000	<0.50	0.476	0.80	19	<0.30	<20	548,000	312	<2.0	1.63	<2.0	3,590,000	<0.050	<5.0	0.364	<0.50	6.5
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	87.1	<0.50	1,290	0.475	295,000	<0.50	0.240	0.78	<10	<0.30	<20	594,000	366	<2.0	1.54	<2.0	3,630,000	<0.050	<5.0	0.398	<0.50	8.8
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	13-Mar-17	D	227	<0.50	<2.0	53.8	<0.50	680	0.614	205,000	<0.50	0.537	2.13	411	0.44	<20	350,000	105	<2.0	2.49	<2.0	2,360,000	<0.050	5.3	0.376	1.13	15.1
P3.8-3I	Porewater	P3.8-3	CS	WB	2.6-3.0	2.6	3.0	Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	44.4	<0.50	850	0.189	155,000	<0.50	0.068	2.35	<10	<0.30	<20	237,000	15	<2.0	0.56	<2.0	1,860,000	<0.050	<5.0	0.443	<0.50	4.2
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	D	2.0	0.310	0.56	278	<0.010	425	0.123	161,000	<1.0	2.86	<0.40	<60	<0.10	13.3	166,000	1,340	6.75	2.93	1.39	1,070,000	0.0392	<0.40	2.05	0.41	4.6
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	100	<0.50	970	0.112	115,000	<0.50	1.46	0.80	<10	<0.30	<20	206,000	827	2.7	1.71	<2.0	1,830,000	<0.050	<5.0	0.792	0.50	3.6
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	167	<0.50	1,400	0.417	279,000	<0.50	2.50	0.87	10	<0.30	<20	554,000	1,390	<2.0	1.93	<2.0	3,800,000	<0.050	<5.0	0.610	<0.50	8.5
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	D	<5.0	<0.50	<2.0	98.0	<0.50	1,080	0.248	259,000	<0.50	1.74 J	0.81	<10 UJ	<0.30	<20	483,000	950	3.0	1.58	<2.0	3,070,000	<0.050	<5.0	0.542	<0.50	5.2 J
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	56.6	<0.50	830	0.126	142,000	<0.50	0.844	0.95	<10	<0.30	<20	250,000	472.00	2.6	1.41	<2.0	1,830,000	<0.050	<5.0	0.62	<0.50	4.5
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	54.1	<0.50	1,070	0.102	139,000	<0.50	0.472	2.17	<10	<0.30	<20	254,000	256	<2.0	1.61	<2.0	2,120,000	<0.050	<5.0	0.715	<0.50	4.5
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	145	<0.50	1,510	0.328	297,000	<0.50	1.09	0.99	<10	<0.30	<20	595,000	835	<2.0	1.89	<2.0	4,200,000	0.079	<5.0	0.495	<0.50	5.1
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	88.3	<0.50	1,180	0.157	230,000	<0.50	0.546	0.76	<10	<0.30	<20	438,000	739	<2.0	1.43	<2.0	2,840,000	<0.050	<5.0	0.473	<0.50	4.3
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-15	D	<5.0	<0.50	<2.0	70.3	<0.50	990	0.129	163,000	<0.50	0.142	1.35	<10	<0.30	<20	291,000	170	<2.0	1.04	<2.0	2,390,000	<0.050	<5.0	0.479	<0.50	6.6
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	66.7	<0.50	1,260	0.136	183,000	<0.50	0.132	0.67	<10	<0.30	<20	323,000	176	<2.0	0.78	<2.0	2,800,000	<0.050	<5.0	0.415	<0.50	3.2
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	102	<0.50	1,300	0.205	250,000	<0.50	0.255	1.35	<10	<0.30	<20	542,000	400	<2.0	1.57	<2.0	3,340,000	<0.050	<5.0	0.429	<0.50	10.6
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	77.2	<0.50	990	0.164	243,000	<0.50	0.064	0.67	<10	<0.30	<20	452,000	112	<2.0	1.06	<2.0	2,810,000	<0.050	<5.0	0.46	<0.50	5.1
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	57.9	<0.50	880	0.124	215,000	<0.50	0.096	0.63	<10	<0.30	<20	335,000	106	<2.0	1.11	<2.0	2,090,000	<0.050	<5.0	0.556	<0.50	10.5
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	53.6	<0.50	940	0.089	196,000	<0.50	0.105	0.74	<10	<0.30	<20	307,000	165	<2.0	0.93	<2.0	2,090,000	<0.050	<5.0	0.463	<0.50	5.6
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	D	<5.0	<0.50	<2.0	83.8	<0.50	1,240	0.246	239,000	<0.50	0.254	0.68	<10	<0.30	<20	468,000	716	<2.0	1.72	<2.0	3,020,000	<0.050	<5.0	0.417	<0.50	4.5
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	85.2	<0.50	1,200	0.229	287,000	<0.50	0.295	0.53	22	<0.30	<20	507,000	609	<2.0	1.45	<2.0	3,220,000	<0.050	<5.0	0.412	<0.50	6.7
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	61.5	<0.50	700	0.114	215,000	<0.50	0.145	0.54	<10	<0.30	<20	342,000	157	<2.0	0.88	<2.0	2,400,000	<0.050	<5.0	0.405	<0.50	<3.0
P3.8-3D	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	45.6	<0.50	880	0.06	137,000	<0.50	<0.050	0.84	<10	<0.30	<20	199,000	8.82	<2.0	<0.50	<2.0	1,650,000	<0.050	<5.0	0.447	<0.50	<3.0
Eastern IRA Barrier																																				
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	16-Mar-13	D	<5.0	<0.50	<2.0	70.4	<0.50	660	0.504	128,000	<0.50	3.13	1.53	18	<0.30	<20	203,000	395	3.1	29.9	<2.0	1,670,000	0.050	<5.0	1.64	0.53	10.3
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	20-Mar-13	D	<5.0	<0.50	<2.0	75.3	<0.50	580	0.430	114,000	<0.50	1.93	0.61	<10	<0.30	<20	203,000	263	<2.0	4.10	<2.0	1,540,000	0.085	<5.0	0.874	<0.50	3.3
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	47.9	<0.50	730	<0.050	96,800	<0.50	0.744	<0.50	224	<0.30	<20	131,000	183	<2.0	1.05	<2.0	1,200,000	<0.050	<5.0	0.391	1.25	3.4
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	14-Jun-13	T	14,100	<0.50	9.0	109	<0.50	720	0.178	98,400	13.9	6.29	17.9	21,900	8.67	38	144,000	401	2.6	5.19	<2.0	1,190,000	0.061	914	2.86	65.5	26.6
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	234	<0.50	1,070	0.577	376,000	<0.50	0.322	0.78	16	<0.30	<20	634,000	44.7	<2.0	1.35	<2.0	3,160,000	<0.050	<5.0	0.227	<0.50	13.5
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	16-Sep-13	T	8,760	<0.50	4.7	265	<0.50	1,030	0.562	374,000	9.67	4.29	10.8	13,500	4.89	39	634,000	261	<2.0	4.12	<2.0	3,130,000	<0.050	710	1.96	47.9	19.6 J+
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	12-Dec-13	D	<5.0	<0.50	<2.0	190	<0.50	840	0.374	417,000	<0.50	0.841	<0.50	590	<0.30	<20	609,000	163	<2.0	0.87	<2.0	3,410,000	<0.050	<5.0	0.343	<0.50	5.8
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	12-Dec-13	T	14,900	<0.50	8.6	258	<0.50	860	0.543	414,000	14.7	7.70	19.6	25,300	8.89	42	612,000	573	<2.0	6.41	<2.0	3,470,000	0.073	1,030	2.81	74.0	32.4
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	94.4	<0.50	1,020	0.118	194,000	<0.50	0.138	0.70	25	<0.30	<20	291,000	15.1	<2.0	<0.50	<2.0	2,410,000	<0.050	<5.0	0.173	<0.50	3.7
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	11-Mar-14	T	7,010	<0.50	3.1	126	<0.50	1,040	0.182	196,000	5.90	3.16	8.29	9,730	3.55	26	294,000	204	<2.0	2.54	<2.0	2,400,000	<0.050	508	1.28	31.5	13.6
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	47.9	<0.50	1,060	<0.050	95,700	<0.50	0.544	0.54	277	<0.30	<20	142,000	119	<2.0	0.93	<2.0	1,750,000	<0.050	<5.0	0.219	0.91	3.1
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	11-Jun-14	T	23,800	<0.50	9.2	157	<0.50	1,080	0.368	94,200	23.1	9.13	31.1	36,300	11.4	50.0	147,000	454	2.5	9.31	<2.0	1,720,000	0.083	1,500	3.46	111	52.1
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	214	<0.50	1,430	<0.050	317,000	<0.50	0.438	<0.50	403	<0.30	<20	543,000	45.3	<2.0	0.98	<2.0	3,850,000	<0.050	<5.0	0.153	<0.50	<3.0
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	9-Sep-14	T	8,680	<0.50	3.3	236	<0.50	1,290	0.277	290,000	7.29	3.54	10.8	12,800	4.74	32	497,000	184	<2.0	3.78	<2.0	3,560,000	0.068	615	1.56	39.5	19.8
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	1-Dec-14	D	<5.0	<0.50	<2.0	198	<0.50	1,420	0.160	329,000	<0.50	0.407	0.57	900	<0.30	<20	550,000	46.7	<2.0	2.11	<2.0	3,790,000	<0.050	<5.0	0.215	0.57	5.9
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	1-Dec-14	T	6,640	<0.50	3.9	229	<0.50	1,430	0.303	312,000	8.80	3.21	9.72	13,200	4.47	30.0	518,000	231	<2.0	7.24	<2.0	3,650,000	<0.050	614	1.49	38.5	18.4
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	10-Mar-15	D	<5.0	<0.50	<2.0	54.5	<0.50	1,120	0.054	91,100	<0.50	0.093	0.59	207	<0.30	<20	146,000	28.2	<2.0	<0.50	<2.0	1,710,000	<0.050	<5.0	0.14	<0.50	4.7
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	10-Mar-15	T	4,040	<0.50	2.8	94.4	<0.50	1,210	0.131	97,600	4.14	1.53	4.62	6,370	2.39	<20	159,000	141	<2.0	1.57	<2.0	1,810,000	<0.050	344	0.935	19.7	8.9
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	70.4	<0.50	1,180	0.061	132,000	<0.50	<0.050	<0.50	<10	2.56	<20	209,000	5.1	<2.0	<0.50	<2.0	2,400,000	<0.050	<5.0	0.106	<0.50	3.5
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	16-Jun-15	T	3,290	<0.50	<2.0	89.9	<0.50	1,160	0.124	130,000	3.12	1.5	4.12	5,310	1.66	<20	214,000	97.8	<2.0	1.23	<2.0	2,400,000	<0.050	246	0.612	14.3	6.4
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	8-Sep-15	D	<5.0	<0.50	<2.0	205	<0.50	1,130	0.469	346,000	<0.50	0.23	1.44	79	<0.30	<20	621,000	22.8	<2.0	1	<2.0	4,050,000	<0.050	<5.0	0.132	<0.50	8.9
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	8-Sep-15	T	8,360	<0.50	4.5	211	<0.50	1,110	0.457	294,000	8.86	4.41	11.3	15,200	5.45	30	514,000	328	<2.0	3.93	<2.0	3,490,000	<0.050	620	1.6	43.7	21.7
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	8-Dec-15	D	6	0.05	0.637	39	<0.0050	155	0.126	98,400	<0.50	<0.050	0.3	53	<0.050	3.54	46,000	823	0.097	0.2	7.06	239,000	<0.0020	0.24	0.111	0.26	6.4
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	8-Dec-15	T	228	0.203	0.947	40.2	0.0062	165	0.984	97,100	<0.50	0.122	0.74	304	0.236	3.7	46,300	951	0.196	0.36	<0.20	241,000	<0.0050	9.21	0.147	0.755	3
P4.2-3S	Porewater EAZ	P4.2-3	CS	EB	0.6-1.0	0.6	1.0	Weatherd Colluvium	---	1-Mar-16	---	Well Destroyed																								
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Mar-13	D	3.5	0.125	0.303	33.6	<0.0050	60.3	0.176	62,400	<0.50	0.869	0.63	<30	<0.050	1.42	15,700	855	3.77	2.24	0.40	29,400	0.0136	<0.20	1.16	0.459	8.0
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	D	3.1	0.113	2.40	77.1	<0.0050	107	0.0054	118,000	<0.50	0.771	<0.20	236	<0.050	1.66	36,900	3,040	0.398	0.76	0.39	115,000	<0.0020	0.34	0.974	0.244	1.6
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	D	2.3	0.205	1.63	222	0.0052	126	0.0245	247,000	<0.50	1.87	0.31	583	<0.050	2.13	73,900	5,100	0.929	2.01	<0.20	213,000	<0.0020	<0.20	1.41	0.276	4.1
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Dec-13	D	<2.0	0.199	1.50	499	<0.010	184	0.017	566,000	<1.0	5.06	<0.40	1,250	<0.10	1.97	184,000	11,500	0.78	2.39	<0.40	594,000	<0.0040	<0.40	1.72	0.17	2.4
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	200	<0.50	200	<0.050	336,000	<0.50	2.16	<0.50	327	<0.30	<20	131,000	6,070	<2.0	1.10	<2.0	691,000	<0.050	<5.0	0.877	<0.50	<3.0
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	D	1.9	0.338	0.549	120	<0.0050	181	0.0090	177,000	<0.50	1.13	0.50	166	<0.050	1.44	64,300	3,250	0.595	1.35	<0.20	402,000	<0.0020	<0.20	0.903	0.143	5.6
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Sep-14	D	<2.0	0.071	0.51	363	<0.010	291	0.035	411,000	<1.0	2.70	<0.40	520	<0.10	1.52	178,000	9,310	0.38	1.20	<0.40	941,000	<0.0040	<0.40	0.979	0.13	<2.0
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	D	<5.0	<0.50	<2.0	264	<0.50	380	0.250	349,000	<0.50	2.11	0.54	22	<0.30	<20	208,000	7,040	<2.0	0.90	<2.0	1,130,000	<0.050	<5.0	0.703	<0.50	<3.0
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	D	<5.0	<0.50	<2.0	176	<0.50	290	0.795	222,000	<1.0	2.15	0.77	<20	<0.30	<20	105,000	4,840	<2.0	1.48	<2.0	809,000	<0.050	<5.0	0.805	0.66	6.10
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Jun-15	D	2.1	0.065	0.62	114	<0.010	262	0.040	120,000	<1.0	1.14	<0.40	176	<0.10	0.61	55,500	2,410	0.48	0.61	<0.40	577,000	<0.0040	<0.40	0.667	0.60	2.1
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	D	2.3	0.052	1.27	263	<0.010	323	0.035	345,000	<1.0	2.87	0.43	975	<0.10	1.55	168,000	6,420	0.56	1.83	<0.40	1,030,000	0.0122	<0.40	0.839	0.29	6.5
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	198	<0.50	340	0.171	373,000	5.79	2.73	0.76	237	<0.30	<20	212,000	6,490	<2.0	1.59	<2.0	1,220,000	<0.050	<5.0	0.791	<0.50	3.2
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	1-Mar-16	D	<2.0	0.448	0.31	80.7	<0.010	245	0.243	140,000	<1.0	0.37	1.24	<30	<0.10	1.18	69,300	1,540	0.72	1.91	<0.40	614,000	0.0275	<0.40	0.623	0.43	5.4
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-May-16	D	<2.0	0.054	0.39	89.0	<0.010	262	0.012	160,000	<1.0	1.03	<0.40	167	<0.10	1.23	92,800	3,370	0.30	0.58	0.54	809,000	<0.0040	<0.40	0.638	0.15	4.6
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-Aug-16	D	<2.0	0.216	0.52	132	<0.010	287	0.047	238,000	<1.0	1.35	<0.40	241	<0.10	1.29	128,000	3,890	0.476	1.38	<0.40	999,000	<0.0040	<0.40	0.737	0.22	2.5
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	184	<0.50	350	<0.050	318,000	<0.50	2.00	<0.50	506	<0.30	<20	195,000	6,450	<2.0	0.95	<2.0	1,270,000	<0.050	<5.0	0.947	<0.50	6.7
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-17	D	<2.0	0.214	0.30	80.5	<0.010	270	0.851	149,000	<1.0	0.97	0.69	<30	0.19	1.41	92,600	322	0.59	1.27	<0.40	846,000	0.0144	<0.40	1.17	0.42	5.7
DUP-1 (P4.2-3I)	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3	Weathered Colluvium	---	13-Mar-17	D	<2.0	0.223	0.34	82.5	<0.010	267	0.845	146,000	<1.0	0.96	1.23	<30	0.23	1.41	90,900	326	0.58	1.32	<0.40	828,000	0.0146	<0.40	1.19	0.41	6.6
QA/QC RPD										Duplicates	D	---	4%	13%	2%	---	1%	1%	2%	---	1%	---	---	---	0%	2%	1%	2%	4%	---	2%	1%	---	2%	2%	15%
P4.2-3I	Porewater	P4.2-3	CS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	D	<2.0	0.095	0.51	60.5	<0.010	247	0.021	106,000	<1.0	0.80	<0.40	---	<0.10	0.88	64,600	2,140	0.7	0.79	<0.40	688,000	0.0056	<0.40	0.809	0.17	<2.0
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Mar-13	D	9.4	0.199	0.53	33.4	<0.010	322	0.016	70,800	<1.0	0.31	0.43	<30	<0.10	14.9	78,100	619	2.66	1.21	<0.40	589,000	0.0084	<0.40	0.849	0.43	4.3
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	D	5.1	<0.50	<2.0	25.4	<0.50	140	<0.050	67,400	<0.50	0.520	<0.50	86	<0.30	<20	18,900	1,460	<2.0	0.59	<2.0	47,300	<0.050	<5.0	0.255	<0.50	<3.0
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	D	2.0 J	0.030 J	0.374	95.9	<0.0050	92.3	0.0051 J	153,000	<0.50	0.719	<0.20 UJ	68	<0.050	1.20	43,400	2,980	0.298 J	0.60 J	<0.20	130,000	0.0037	<0.20	0.295	0.068	<1.0 UJ
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	D	2.4	0.060	0.348	60.0	<0.0050	78.5	0.0310	102,000	<0.50	0.438	0.29	<30	<0.050	0.75	29,000	1,980	0.171	0.56	<0.20	78,500	0.0054	<0.20	0.110	0.195	2.8
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	D	1.9	0.018	0.403	40.9	<0.0050	86.4	0.0329 J	73,300	<0.50	0.311	0.45 J	<30	<0.050	0.95	19,300	1,510	0.234	0.45 J	<0.20	60,600	0.0023	<0.20	0.0916	0.091	2.7 J
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Jun-14	D	2.6	0.017	0.339	45.1	<0.0050	107	0.0196	75,200	<0.50	0.297	0.83	<30	<0.050	0.95	23,100	1,460	0.243	0.43	<0.20	115,000	<0.0020	<0.20	0.143	0.090	2.7
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	9-Sep-14	D	1.7	0.016	0.215	65.8	<0.0050	104	0.0252	93,800	<0.50	0.322	0.42	<30	<0.050	0.70	28,400	2,140	0.155	0.45	<0.20	98,900	0.0043	<0.20	0.102	0.061	2.1
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Dec-14	D	1.0	0.013	0.285	40.5	<0.0050	84.1	0.0328	75,600	<0.50	0.095	0.31	<30	<0.050	0.72	26,700	380	0.169	0.74	<0.20	97,700	0.0029	<0.20	0.0724	0.102	2.7
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	10-Mar-15	---	Well infilled with sand and gravel																								
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	1-Mar-16	D	10.0	0.076	0.643	33.0	<0.0050	99.4	0.0510	80,500	<0.50	0.067	0.36	86	<0.050	2.67	34,000	2,270	0.072	0.27	1.25	147,000	<0.0020	0.29	0.0505	0.164	9.7
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-May-16	D	3.5	0.026	0.598	50.6	<0.0050	85.5	0.0064	86,500	<0.50	0.110	<0.20	117	<0.050	0.81	21,900	2,130	0.147	<0.20	0.93	69,100	<0.0020	<0.20	0.0991	0.062	2.9
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	17-Aug-16	D	4.8	0.010	0.231	70.5	<0.0050	116	<0.0050	119,000	<0.50	0.086	<0.20	63	<0.050	1.45	46,100	2,500	0.058	<0.20	0.48	203,000	<0.0020	<0.20	0.114	<0.050	<1.0
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	21-Nov-16	D	4.0	0.022	0.569	55.5	<0.0050	82.5	<0.0050	91,300	<0.50	0.079	0.22	121	<0.050	1.27	29,300	2,240	0.106	<0.20	<0.20	102,000	<0.0020	<0.20	0.103	0.086	7.2
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-17	D	4.3	0.070	1.09	44.3	<0.0050	165	<0.0050	86,400	<0.50	0.326	<0.20	378	0.056	3.39	44,600	1,730	1.77	0.38	<0.20	262,000	<0.0020	<0.20	0.31	0.179	1.4
DUP-2 (P4.2-3D)	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5	Colluvium	---	13-Mar-17	D	25.4	0.073	1.14	37.4	<0.0050	154	0.0067	85,700	<0.50	0.357	<0.20	366	<0.050	3.23	43,800	1,510	0.839	0.33	<0.20	252,000	<0.0020	0.20	0.299	0.186	<1.0
QA/QC RPD										Duplicates	D	---	4%	4%	17%	---	7%	---	1%	---	9%	---	3%	---	5%	2%	14%	71%	---	---	4%	---	---	4%	---	---
P4.2-3D	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	5-Jun-17	D	<2.0	<0.020	0.50	58.1	<0.010	331	<0.010	84,900	<1.0	0.23	<0.40	---	<0.10	2.21	50,800	1,610	0.24	<0.40	0.49	588,000	<0.0040	<0.40	0.267	0.19	<2.0
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-11	D	15.1	<0.50	<2.0	114	<0.50	1,520	0.131	169,000	<0.50	5.75	<2.0	<10	<0.30	35	296,000	3,520	12.5	3.04	<2.0	2,940,000	0.064	<5.0	10.6	2.12	3.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	D	6.0	<0.50	<2.0	142	<0.50	1,800	0.113	179,000	<0.50	4.92	0.98	<10	<0.30	47	404,000	3,260	9.8	5.31	<2.0	3,370,000	0.059	<5.0	7.02	1.92	26.6
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Feb-12	D	<60	0.21	<1.0	94.7	<0.10	1,300	<0.10	142,000	<10	4.1	<10	<150	<1.0	28	312,000	3,240	9.1	9.3	<4.0	2,920,000	<0.040	<4.0	5.75	1.3	68
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	D	8.3	<0.50	<2.0	82.6	<0.50	1,430	<0.050	156,000	<0.50	0.245	1.64	<10	<0.30	33	338,000	1,160	8.7	3.79	<2.0	2,920,000	<0.050	<5.0	6.13	1.69	15.4
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Apr-12	---	Well Not Sampled																								
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-May-12	D	<5.0	<0.50	<2.0	61.6	<0.50	2,360	0.207	235,000	<0.50	0.692	0.66	<10	<0.30	99	571,000	2,700	18.2	8.07	<2.0	5,200,000	0.075	<5.0	10.0	1.35	440
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	D	12.8	<0.50	<2.0	106	<0.50	1,480	0.249	239,000	<0.50	2.93	2.73	19	<0.30	49	404,000	8,270	24.1	5.15	<2.0	4,020,000	<0.050	<5.0	16.1	1.94	59.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	D	7.6	<0.50	<2.0	119	<0.50	1,670	0.162	232,000	<0.50	3.42	2.05	---	0.53	53	429,000	10,600	24.4	3.38	<2.0	3,950,000	0.051	<5.0	16.6	1.69	46.5
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Aug-12	---	Well Not Sampled																								
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Sep-12	D	<5.0	<0.50	<2.0	162	<0.50	2,030	0.212	341,000	<0.50	0.906	2.38	18	<0.30	44	597,000	4,410	10.5	3.04	<5.0	5,020,000	0.068	<5.0	17.0	1.44	34.7
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	193	<0.50	1,970	0.211	365,000	<0.50	1.73	1.83	<10	<0.30	41	662,000	10,500	12.5	11.4	<2.0	5,190,000	0.056	<5.0	16.9	1.03	63.5
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Nov-12	---	Well Not Sampled - Dry																								
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Dec-12	D	6.5	<0.50	<2.0	119	<0.50	2,210	0.144	296,000	<0.50	0.141	5.77	<10	<0.30	61	675,000	649	4.5	5.75	<2.0	5,240,000	<0.050	<5.0	12.4	<0.50	275
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	114	<0.50	1,540	<0.050	264,000	<0.50	0.747	1.61	<10	<0.30	29	494,000	4,900	9.4	1.12	<2.0	4,150,000	<0.050	<5.0	14.0	0.77	21.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	91.3	<0.50	1,530	<0.050	204,000	<0.50	0.658	0.93	<10	<0.30	35	383,000	3,220	9.3	1.32	<2.0	3,620,000	<0.050	<5.0	11.5	0.79	24.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13	D	<5.0	<0.50	<2.0	92.5	<0.50	1,930	0.063	211,000	0.85	1.66	2.30	<10	<0.30	40	431,000	3,720	11.1	8.01	<2.0	4,000,000	<0.050	<5.0	11.2	1.22	31.1
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13	T	1,500	<0.50	<2.0	96.8	<0.50	1,820	<0.050	202,000	1.66	3.59	4.87	1,970	0.82	39	394,000	4,900	11.5	6.41	<2.0	3,670,000	<0.050	81.9	11.8	7.16	38.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	125	<0.50	2,550	<0.050	295,000	<0.50	2.45	2.31	45	<0.30	59	632,000	1,330	8.5	2.64	<2.0	5,160,000	<0.050	<5.0	9.38	0.83	97.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Sep-13	T	3,800	0.62	<2.0	125	<0.50	2,210	0.096	289,000	3.50	3.94	8.87	4,340	1.66	60	610,000	1,830	8.1	3.59 J+	<2.0	4,950,000	<0.050	210	8.52	14.3	132
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	113	<0.50	1,790	<0.050	259,000	<0.50	1.94	2.32	<10	<0.30	31	523,000	3,440	7.3	1.21	<2.0	4,340,000	<0.050	<5.0	9.45	0.54	23.5
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-13	T	1,940	<0.50	<2.0	109	<0.50	1,960	<0.050	232,000	1.80	2.07	4.77	2,350	0.86	42	492,000	1,080	4.5	2.70	<2.0	4,600,000	<0.050	113	6.73	7.15	61.1
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	D	5.9	<0.50	<2.0	76.8	<0.50	1,820	0.051	214,000	<0.50	1.26	1.72	83	<0.30	39	459,000	565	6.0	1.56	<2.0	4,010,000	<0.050	<5.0	6.15	<0.50	89.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	T	12,200	0.82	3.9	132	<0.50	1,770	0.231	230,000	12.1	9.69	25.8	15,600	7.40	69	448,000	2,600	8.6	8.03	<2.0	3,880,000	0.082	467	8.91	42.8	198
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	68.6	<0.50	1,840	<0.050	176,000	<0.50	1.49	2.56	69	<0.30	36	367,000	1,200	6.6	1.12	<2.0	3,490,000	<0.050	<5.0	7.35	1.01	45.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-14	T	3,530	<0.50	2.1	80.6	<0.50	1,810	<0.050	171,000	3.43	3.08	8.55	4,000	1.36	44	355,000	1,630	6.8	2.94	<2.0	3,450,000	<0.050	176	7.46	13.2	80.1
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Sep-14	D	<5.0	<0.50	<2.0	186	<0.50	2,100	0.144	340,000	<0.50	0.874	<4.0	<10	<0.30	48	719,000	3,980	8.5	2.40	<2.0	5,580,000	<0.050	<5.0	10.3	0.61	42.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Sep-14	T	76.6	<0.50	<2.0	179	<0.50	2,110	0.180	344,000	<0.50	0.993	1.58	132	<0.30	49	731,000	3,770	9.2	2.92	<2.0	5,740,000	<0.050	5.0	10.4	1.09	88.2
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Dec-14	D	Sample Not Filtered - No Analysis																								
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Dec-14	T	3,130	<0.50	<2.0	159	<0.50	1,700	<0.050	276,000	2.30	3.36	4.93	3,810	1.06	30	515,000	8,520	8.5	2.39	<2.0	4,160,000	<0.050	164	16.0	10.7	42.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-15	D	<5.0	<0.50	<2.0	157	<0.50	1,730	<0.050	266,000	<0.50	0.424	1.30	<10	<0.30	29	575,000	1,350	3.8	0.68	<2.0	4,250,000	<0.050	<5.0	14.7	<0.50	6.2
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-15	T	Well not sampled - insufficient water																								
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	D	8.4	<0.50	7.1	146	<0.50	3,090	0.093	343,000	<0.50	3.77	21.5	750	<0.30	104	892,000	27,800	10.4	1.76	<2.0	7,610,000	<0.050	<5.0	5.69	2.62	11.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Jun-15	T	22,600	0.70	12.1	212	<0.50	2,930	0.483	380,000	19.7	11.3	55.6	21,500	17.3	121	855,000	20,400	21.0	15.7	<2.0	7,220,000	0.057	676	7.25	60.9	307
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	D	<5.0	<0.50	<2.0	157	<0.50	2,730	<0.050	326,000	<0.50	0.803	<0.50	75	<0.30	72	824,000	9,980	9.7	2.08	<2.0	7,330,000	<0.050	<5.0	4.84	1.50	4.5
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Sep-15	T	382	1.09	2.1	153	<0.50	2,690	0.139	320,000	0.76	1.22	3.05	732	0.50	75	796,000	9,570	14.4	2.38	<2.0	7,180,000	<0.050	21.8	4.75	2.83	30.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	157	<0.50	1,880	<0.050	342,000	<0.50	0.853	0.52	244	<0.30	29	728,000	11,800	3.8	0.75	<2.0	5,810,000	<0.050	<5.0	3.76	<0.50	12.0

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Dec-15	T	498	<0.50	<2.0	167	<0.50	1,910	<0.050	332,000	0.88	1.31	1.90	1,420	<0.30	29	712,000	12,600	4.3	1.01	<2.0	5,620,000	<0.050	24.1	3.85	1.99	16.8
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	155	<0.50	2,090	<0.050	249,000	<0.50	0.447	<0.50	163	<0.30	45	595,000	6,520	<2.0	<0.50	<2.0	4,570,000	<0.050	<5.0	2.45	<0.50	3.2
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Mar-16	T	319	<0.50	<2.0	113	<0.50	2,070	0.067	205,000	0.72	0.572	1.66	660	0.46	57	551,000	1,630	2.2	0.59	<2.0	4,360,000	<0.050	19.0	2.98	1.46	9.7
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	103	<0.50	1,930	<0.050	237,000	<0.50	1.31	<0.50	493	<0.30	33	529,000	6,280	5.5	1.29	<2.0	4,600,000	<0.050	<5.0	5.37	1.37	27.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-May-16	T	11,900	0.79	8.2	208	<0.50	1,990	0.579	270,000	13.6	19.2	46.4	25,000	11.0	49	538,000	14,000	30.2	14.0	<2.0	4,650,000	0.073	503	16.5	46.2	265
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Aug-16	D	<5.0	<0.50	3.3	161	<0.50	2,920	<0.050	316,000	<0.50	2.42	<0.50	703	<0.30	57	759,000	7,630	8.1	1.67	<2.0	6,110,000	<0.050	<5.0	8.89	1.17	4.6
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Aug-16	T	2,340	<0.50	4.8	172	<0.50	2,930	0.106	339,000	1.78	4.46	6.33	5,220	2.07	65	766,000	10,800	9.4	3.34	<2.0	6,050,000	<0.050	178	7.64	13.2	33.4
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Nov-16	D	<5.0	<0.50	<2.0	123	<0.50	2,450	<0.050	256,000	<0.50	3.43	<0.50	696	<0.30	49	620,000	6,640	16.0	1.49	<2.0	5,440,000	<0.050	<5.0	8.77	0.60	<3.0
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Nov-16	T	849	<0.50	<2.0	137	<0.50	2,430	<0.050	426,000	0.82	3.73	4.79	2,740	1.04	51	659,000	6,880	10.5	18.7	<2.0	5,780,000	<0.050	39.5	6.84	3.83	10.2
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Mar-17	D	<5.0	<0.50	<2.0	88.8	<0.50	2,110	<0.050	205,000	<0.50	1.14	0.51	138	<0.30	38	518,000	2,900	7.4	1.09	<2.0	4,380,000	<0.050	<5.0	6.7	<0.50	3.1
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Mar-17	T	1,490	<0.50	2.1	116	<0.50	2,150	<0.050	306,000	1.29	2.98	6.43	4,050	1.16	44	509,000	4,670	8.8	3.05	<2.0	4,490,000	<0.050	70.1	7.29	7.52	17.6
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	D	11.0	<0.50	<2.0	104	<0.50	2,310	<0.050	217,000	<0.50	2.44	3.14	420	0.71	44	561,000	7,040	8.4	8.08	<2.0	4,850,000	<0.050	<5.0	6.03	0.51	22.9
P4.8-8S	Porewater EAZ	P4.8-8	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-17	T	38,400	<0.50	12.4	248	1.13	2,350	0.51	264,000	43.1	31.9	76.2	62,500	25.1	189	614,000	10,900	13.3	22.7	<2.0	5,220,000	0.289	1,410	13.2	166	142
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Dec-11	D	12.3	<0.50	<2.0	45.9	<0.50	880	<0.050	73,700	<0.50	3.6	1.08	16	<0.30	24	132,000	3,290	9.2	1.72	<2.0	1,470,000	<0.050	<5.0	4.73	2.25	8.9
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	D	27.8	<0.50	<2.0	67.6	<0.50	1,380	0.06	122,000	<0.50	2.71	0.66	34	<0.30	32	253,000	2,320	11.9	1.8	<2.0	2,230,000	<0.050	<5.0	7.49	2.59	37.6
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Feb-12	D	<60	<0.20	<1.0	61.5	<0.10	1,080	<0.10	138,000	<10	<1.0	<10	<90	<1.0	21.5	290,000	2,360	9.8	<4.0	<4.0	2,490,000	<0.040	<4.0	6.57	1.6	114
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Mar-12	D	6.9	<0.50	<2.0	67.3	<0.50	1,080	<0.050	146,000	<0.50	0.811	0.84	<10	<0.30	24	282,000	2,570	6.8	4.59	<2.0	2,240,000	<0.050	<5.0	4.71	1.34	85.1
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Apr-12	D	<5.0	<0.50	<2.0	70.2	<0.50	1,300	<0.050	171,000	<0.50	8.88	<0.50	391	<0.30	27	334,000	5,350	10.9	6.60	<2.0	2,460,000	<0.050	<5.0	6.94	0.69	90.9
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	D	<5.0	<0.50	<2.0	56.8	<0.50	2,320	0.097	208,000	<0.50	1.30	0.94	<10	<0.30	114	524,000	2,780	21.2	11.0	<4.0	4,620,000	0.085	<5.0	10.3	0.95	181
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	D	<5.0	<0.50	<2.0	69.8	<0.50	1,420	0.101	226,000	<0.50	1.15	2.45	24	0.31	145	420,000	4,440	41.1	7.10	<8.0	4,410,000	0.185	<5.0	31.7	1.33	110
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	D	<5.0	<0.50	<2.0	66.7	<0.50	1,400	0.192	202,000	<0.50	0.920	1.60	25	<0.30	107	363,000	4,060	41.4	2.64	<5.0	3,160,000	0.097	<5.0	29.3	1.72	80.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	D	<5.0	<0.50	<2.0	55.0	<0.50	1,630	<0.20	174,000	<0.50	0.278	1.45	<10	0.52	78	350,000	2,220	25.9	5.29	<2.0	3,530,000	<0.050	<5.0	19.3	1.38	181
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-12	D	<5.0	<0.50	<2.0	58.2	<0.50	1,970	<0.050	203,000	<0.50	0.387	0.84	18	<0.30	77	449,000	144	15.7	1.30	<2.0	4,150,000	0.228	<5.0	15.6	1.47	63.8
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	D	<5.0	<0.50	<2.0	66.1	<0.50	1,640	<0.050	219,000	<0.50	0.191	1.62	11	<0.30	69	382,000	105	14.0	2.22	<2.0	3,470,000	<0.050	<5.0	18.5	0.87	63.4
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Nov-12	D	47.4	<0.50	<2.0	69.9	<0.50	1,540	<0.050	267,000	<0.50	0.165	1.11	63	<0.30	80	502,000	48.1	9.8	1.60	<2.0	3,960,000	<0.050	<5.0	18.0	0.77	50.6
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	D	6.5	<0.50	<2.0	79.8	<0.50	1,370	<0.050	271,000	<0.50	0.150	6.77	12	<0.30	48	485,000	413	7.4	3.29	<2.0	3,260,000	<0.050	<5.0	19.2	<0.50	75.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	D	<5.0	<0.50	<2.0	85.6	<0.50	1,280	0.063	299,000	<0.50	0.139	0.84	<10	<0.30	54	523,000	423	6.5	1.00	<2.0	3,660,000	<0.050	<5.0	22.0	<0.50	24.5
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	82.3	<0.50	1,720	<0.050	312,000	<0.50	0.074	0.50	<10	<0.30	66	615,000	8.28	4.5	1.21	<2.0	4,580,000	<0.050	<5.0	15.8	<0.50	56.6
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Jun-13	D	<5.0	<0.50	<2.0	64.8	<0.50	1,360	0.099	236,000	<0.50	1.62	2.67	60	<0.30	38	416,000	2,710	11.4	2.95	<2.0	2,960,000	<0.050	<5.0	14	0.70	105
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-13	T	33,900	0.68	8.7	245	1.49	1,480	0.425	271,000	28.3	23.3	61.0	41,300	23.9	138	437,000	11,200	16.9	24.0	<2.0	2,770,000	0.238	939	21.5	127	560
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	D	5.6	<0.50	<2.0	71.9	<0.50	1,390	0.118	218,000	<0.50	2.09	2.89	20	<0.30	46	374,000	669	8.1	0.89	<2.0	3,140,000	<0.050	<5.0	14.6	0.87	21.7
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	T	27,300	1.00	8.2	254	1.08	1,440	0.158	231,000	25.5	16.5	39.2	32,200	14.0	149	393,000	7,830	17.8	14.6	<2.0	3,170,000	0.154	946	19.3	104	182
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	D	7.9	<0.50	<2.0	134	<0.50	2,360	<0.050	323,000	<0.50	0.770	<0.50	69	<0.30	76	722,000	18,200	6.8	1.12	<2.0	5,730,000	<0.050	<5.0	13.7	1.71	3.7
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	T	9,140	0.73	6.3	174	<0.50	2,320	<0.050	325,000	9.87	7.87	15.0	11,300	8.53	98	710,000	21,000	26.7	8.26	<2.0	5,750,000	0.086	398	14.2	34.6	86.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	80.8	<0.50	1,360	<0.050	251,000	<0.50	5.22	0.58	210	<0.30	31	446,000	9,070	14.5	1.42	<2.0	3,160,000	<0.050	<5.0	11.9	0.58	10.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	T	1,400	<0.50	<2.0	87.2	<0.50	1,320	<0.050	256,000	1.15	6.38	3.07	2,140	1.28	34	453,000	9,750	14.4	2.61	<2.0	3,180,000	<0.050	65.7	12.4	4.58	25.4
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	57.6	<0.50	1,340	<0.050	158,000	<0.50	4.06	1.21	70	<0.30	26	279,000	6,220	14.0	2.86	<2.0	2,420,000	<0.050	<5.0	10.2	0.60	9.3
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-14	T	1,150	<0.50	2.4	63.3	<0.50	1,250	<0.050	152,000	1.15	4.80	3.64	1,880	1.04	28	266,000	6,450	13.7	3.16	<2.0	2,280,000	<0.050	56.6	10.0	4.67	17.8
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	42.5	<0.50	1,420	<0.050	187,000	<0.50	1.95	1.06	26	<0.30	35	315,000	739	7.3	4.98	<2.0	2,690,000	<0.050	<5.0	12.0	0.55	12.7
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	T	1,320	<0.50	<2.0	70.7	<0.50	1,850	<0.050	258,000	1.20	4.03	3.48	1,900	1.28	51	430,000	2,510	10.9	7.27	<2.0	3,910,000	<0.050	58.5	17.1	4.79	24.9
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	D	6.4	<0.50	6.5	86.7	<0.50	2,890	0.118	298,000	<0.50	0.358	<0.50	17	<0.30	101	875,000	13,500	2.5	1.99	5.4	7,140,000	<0.050	<5.0	5.65	2.50	<3.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	T	847	0.76	8.5	108	<0.50	2,960	<0.050	302,000	1.74	2.46	2.62	1,400	0.97	103	896,000	16,000	7.9	3.16	<2.0	7,070,000	<0.050	47.5	5.81	6.80	16.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	D	6.8	<0.50	<2.0	99.9	<0.50	1,420	0.057	273,000	<0.50	2.44	<0.50	687	<0.30	50.0	517,000	8,560	13.9	1.15	<2.0	4,380,000	<0.050	<5.0	20.6	0.90	7.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	9-Mar-15	T	32,900	0.87	15.1	349	1.00	1,590	1.65	361,000	35.6	29.8	81	57,300	48.5	99	577,000	18,700	36.2	26.7	<2.0	4,260,000	0.286	1,230	29.5	171	240
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	106	<0.50	1,530	<0.050	321,000	<0.50	1.11	<0.50	73	<0.30	50.0	554,000	3,520	5.3	0.84	<2.0	4,580,000	<0.050	<5.0	14.4	<0.50	9.2
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	T	514	<0.50	<2.0	118	<0.50	1,550	0.066	314,000	0.82	2.38	2.21	1,710	0.86	51	561,000	4,530	6.8	1.28	<2.0	4,500,000	<0.050	28.5	15.1	2.38	8.3
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	D	<5.0	<0.50	<2.0	164	<0.50	1,990	<0.050	393,000	<0.50	2.08	<0.50	401	<0.30	58	758,000	6,570	9.1	1.04	<2.0	6,030,000	<0.050	<5.0	10.5	1.78	7.8
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	T	3,320	0.72	2.6	182	<0.50	2,020	0.218	379,000	4.24	6.78	10.2	7,310	3.97	62	721,000	7,950	13.8	3.67	<2.0	5,770,000	0.052	175	11.9	15.4	32.3
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	107	<0.50	3,110	<0.050	312,000	<0.50	0.094	<0.50	49	<0.30	61	821,000	3,310	<2.0	<0.50	20	7,330,000	<0.050	<5.0	3.59	1.57	<3.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Dec-15	T	294	<0.50	2.3	96.3	<0.50	3,160	<0.050	304,000	<0.50	0.415	0.72	611	<0.30	59	789,000	3,590	2.3	0.70	<2.0	7,140,000	<0.050	18.6	3.26	2.58	3.4
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	99.0	<0.50	1,750	<0.050	224,000	<0.50	0.933	<0.50	97	<0.30	43	486,000	3,790	5.8	0.95	<2.0	3,840,000	<0.050	<5.0	6.48	<0.50	<3.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	T	569	<0.50	<2.0	88.8	<0.50	1,720	<0.050	201,000	0.88	1.69	1.84	1,390	0.83	43	443,000	3,230	7.2	1.39	<2.0	3,640,000	<0.050	33.1	6.25	2.45	7.7
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	90.1	<0.50	1,900	<0.050	240,000	<0.50	1.39	<0.50	176	<0.30	37	507,000	5,320	6.3	0.53	<2.0	4,370,000	<0.050	<5.0	6.90	0.57	6.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-May-16	T	2,810	0.95	2.6	105	<0.50	1,850	0.206	207,000	2.85	7.96	8.59	6,470	2.98	42	438,000	8,690	10.8	2.86	<2.0	3,830,000	<0.050	134	7.70	10.5	29.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Aug-16	D	<5.0	<0.50	<2.0	93.4	<0.50	1,780	<0.050	241,000	<0.50	0.705	<0.50	74	<0.30	29	448,000	1,860	3.9	<0.50	<2.0	3,810,000	<0.050	<5.0	8.75	<0.50	3.3
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Aug-16	T	5,010	<0.50	2.7	133	<0.50	1,850	0.165	242,000	4.71	8.18	12.1	10,200	4.95	37	447,000	5,100	10.5	4.33	<2.0	3,780,000	<0.050	223	10.4	19.5	40.5
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	112	<0.50	1,860	<0.050	288,000	<0.50	0.650	<0.50	68	<0.30	34	505,000	1,620	4.5	0.71	<2.0	4,230,000	<0.050	<5.0	9.58	<0.50	8.4
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	T	95.4	<0.50	<2.0	126	<0.50	1,790	<0.050	287,000	<0.50	1.34	<0.50	526	<0.30	34	502,000	3,860	4.8	0.56	<2.0	4,340,000	<0.050	<5.0	9.77	<0.50	<3.0
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	144	<0.50	1,610	0.455	333,000	<0.50	0.938	1.25	61	0.48	33	624,000	3,000	4.6	0.7	<2.0	5,160,000	<0.050	<5.0	10.7	<0.50	22.8
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	T	3,860	<0.50	<2.0	189	<0.50	1,750	0.369	403,000	3.30	6.07	6.12	7,510	3.76	38	783,000	9,390	10.3	3.29	<2.0	5,750,000	<0.050	160	12.6	16.1	38.9
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	123	<0.50	1,740	<0.050	279,000	<0.50	2.65	0.79	153	<0.30	27	609,000	10,100	10.8	<0.50	<2.0	4,840,000	<0.050	<5.0	9.53	<0.50	3.7
P4.8-8I	Porewater EAZ	P4.8-8	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-17	T	178	<0.50	<2.0	133	<0.50	1,920	<0.050	305,000	<0.50	3.37	0.51	709	0.42	28	592,000	11,100	12.3	0.71	<2.0	5,050,000	<0.050	9.2	10.2	0.62	6.0
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-11	D	10.9	<0.50	<2.0	60	<0.50	1,180	0.06	99,000	<0.50	0.811	<2.0	<10	<0.30	28	230,000	558	9.8	1.01	<2.0	2,060,000	<0.050	<5.0	4.6	2.28	9.2
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Feb-12	D	<30	0.20	0.68	25.3	<0.050	958	<0.050	50,500	<5.0	1.21	<5.0	<60	<0.50	12.0	95,300	1,390	20.3	<2.0	<2.0	1,240,000	<0.020	<2.0	7.2	3.34	<30
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	26-Mar-12	D	11.0	<0.50	<2.0	21.4	<0.50	1,030	<0.050	50,100	<0.50	0.666	1.18	<10	<0.30	<20	94,900	1,490	18.0	1.17	<2.0	1,010,000	<0.050	<5.0	5.97	2.63	27.8
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Apr-12	D	6.1	<0.50	<2.0	35.0	<0.50	1,890	<0.050	155,000	0.75	0.554	1.81	38	<0.30	52	412,000	1,180	14.3	4.11	<2.0	3,110,000	0.050	<5.0	5.64	2.49	125
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	D	<5.0	<0.50	<2.0	36.4	<0.50	2,190	0.074	168,000	<0.50	0.288	1.03	<10	<0.30	78	455,000	949	16.2	5.53	<2.0	4,040,000	0.081	<5.0	6.53	1.76	186
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	D	<5.0	<0.50	<2.0	49.1	<0.50	1,510	<0.050	185,000	<0.50	0.211	2.63	18	0.31	120	388,000	1,170	42.4	4.69	<6.0	4,060,000	0.171	<5.0	15.8	1.74	96.1
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	D	<5.0	<0.50	<2.0	44.0	<0.50	1,470	0.197	172,000	<0.50	0.149	2.43	<10	<0.30	92	350,000	724	34.8	2.11	<4.0	3,150,000	0.117	<5.0	13.0	1.74	56.9
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Aug-12	D	<5.0	<0.50	<2.0	47.4	<0.50	1,520	<0.20	177,000	<0.50	0.294	2.76	<10	<0.30	72	386,000	484	21.7	1.85	<3.0	3,500,000	0.052	<5.0	12.1	1.62	122
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Sep-12	D	8.7	<0.50	<2.0	12.6	<0.50	3,700	0.081	296,000	<0.50	0.065	1.61	<10	<0.30	145	927,000	47.0	8.9	3.62	<2.0	7,390,000	<0.050	<5.0	2.43	1.41	27.3
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	D	5.4	<0.50	<3.0	163	<0.50	2,610	<0.050	356,000	<0.50	1.59	<0.50	636	<0.30	79	764,000	12,700	3.7	4.91	<2.0	5,860,000	<0.050	<5.0	7.91	0.89	10.8
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Nov-12	D	<5.0	<0.50	<2.0	33.7	<0.50	3,140	<0.050	315,000	<0.50	2.33	<0.50	911	<0.30	140	938,000	1,520	8.5	1.08	<2.0	8,230,000	<0.050	<5.0	3.08	0.75	3.6
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	D	58.3	<0.50	<2.0	17.5	<0.50	3,220	0.086	253,000	<0.50	0.369	4.99	683	<0.30	106	798,000	594	<2.0	1.66	<3.0	6,690,000	<0.050	<5.0	0.653	<0.50	5.1
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	D	67.9	<0.50	<3.0	70.0	<0.50	3,120	<0.050	292,000	<0.50	0.402	<0.50	735	<0.30	106	782,000	4,720	<2.0	3.55	<5.0	6,870,000	<0.050	<5.0	3.91	0.64	3.2
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	14-Mar-13	D	10.0	<0.50	<2.0	181	<0.50	2,120	<0.050	375,000	<0.50	0.890	<0.50	595	<0.30	59	726,000	12,000	<2.0	1.60	<2.0	4,940,000	<0.050	<5.0	7.19	0.71	<3.0
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-13	D	7.0	<0.50	<2.0	53.4	<0.50	3,170	<0.050	296,000	<0.50	2.20	<0.50	682	<0.30	110	834,000	2,340	13.0	2.62	<2.0	6,460,000	<0.050	<5.0	5.18	1.71	8.7
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	D	<5.0	<0.50	<2.0	72.6	<0.50	1,770	<0.050	199,000	<0.50	4.64	<0.50	328	<0.30	40	415,000	5,920	9.5	1.37	<2.0	3,560,000	<0.050	<5.0	7.29	1.03	7.8
P4.8-8D-F	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	19-Sep-13	D	<5.0	<0.50	<2.0	72.2	<0.50	1,840	<0.050	199,000	<0.50	4.66	0.58	407	<0.30	43	407,000	5,870	9.3	1.45	<2.0	3,670,000	<0.050	<5.0	7.42	0.89	9.4
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Dec-13	D	<5.0	<0.50	<2.0	43.0	<0.50	1,360	<0.050	172,000	<0.50	3.86	0.65	1,710	<0.30	27	317,000	5,810	8.2	1.99	<2.0	2,620,000	<0.050	<5.0	6.94	0.83	9.9
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	41.8	<0.50	990	<0.050	154,000	<0.50	3.85	0.72	174	<0.30	20.0	254,000	4,410	10.0	0.95	<2.0	1,890,000	<0.050	<5.0	6.57	0.57	7.1
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Jun-14	D	<5.0	<0.50	<2.0	31.6	<0.50	1,200	<0.050	152,000	<0.50	2.33	2.00	69	<0.30	25	276,000	1,760	6.3	0.88	<2.0	2,070,000	<0.050	<5.0	5.38	<0.50	6.4
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	29.8	<0.50	1,560	<0.050	155,000	<0.50	1.55	0.95	71	<0.30	34	297,000	32.4	5.3	1.49	<2.0	2,410,000	<0.050	<5.0	5.69	<0.50	5.4
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	D	10.4	<0.50	4.1	101	<0.50	3,050	<0.050	305,000	<0.50	0.827	<0.50	322	<0.30	112	932,000	13,700	9.5	2.70	<2.0	7,490,000	<0.050	<5.0	3.76	2.59	<3.0
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	D	<5.0	<0.50	<2.0	124	<0.50	2,510	0.064	373,000	<0.50	0.833	0.97	22	<0.30	72	859,000	3,230	7.1	0.98	<2.0	7,080,000	<0.050	<5.0	8.04	0.53	7.30
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Jun-15	D	<5.0	<0.50	<2.0	67.0	<0.50	3,250	<0.050	324,000	<0.50	0.774	0.57	30.0	<0.30	72	880,000	1,610	8.0	1.24	<2.0	7,680,000	<0.050	<5.0	4.09	1.23	4.2
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	D	5.5	<0.50	4.4	58.9	<0.50	3,280	<0.050	317,000	<0.50	0.104	<0.50	14	<0.30	103	894,000	2,220	<2.0	0.60	<2.0	8,200,000	<0.050	<5.0	4.09	2.25	4.1
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	127	<0.50	1,720	<0.050	320,000	<0.50	0.825	<0.50	48	<0.30	33	625,000	4,040	4.2	<0.50	<2.0	4,860,000	<0.050	<5.0	8.54	<0.50	6.1
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	34.6	<0.50	2,490	<0.050	248,000	<0.50	0.248	0.84	107	<0.30	82	702,000	220	10.9	1.24	<2.0	5,580,000	<0.050	<5.0	2.93	<0.50	5.7
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-May-16	D	<5.0	0.54	<2.0	19.1	<0.50	2,910	0.074	259,000	<0.50	<0.050	0.68	10.0	<0.30	114	798,000	4.89	7.9	<0.50	<2.0	7,180,000	<0.050	<5.0	2.75	1.11	10.6
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Aug-16	D	<5.0	<0.50	<2.0	36.8	<0.50	3,020	<0.050	286,000	<0.50	0.147	<0.50	326	<0.30	109	823,000	858	4.0	<0.50	<2.0	7,250,000	<0.050	<5.0	1.86	0.81	<3.0
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	24.6	<0.50	3,390	0.069	324,000	<0.50	0.097	<0.50	212	<0.30	129	933,000	582	5.5	0.53	<2.0	8,100,000	<0.050	<5.0	2.75	0.90	<3.0
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	D	10.9	<0.50	2.0	43.1	<0.50	3,080	<0.050	317,000	<0.50	0.492	<0.50	660	<0.30	112	884,000	1,480	6.1	<0.50	4	8,020,000	<0.050	<5.0	3.38	1.01	5.7
P4.8-8D	Porewater	P4.8-8	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	6.9	30.7	<0.50	2,880	<0.050	313,000	<0.50	0.617	<0.50	<10	<0.30	98	872,000	2,500	<2.0	<0.50	55.6	8,030,000	<0.050	<5.0	4.21	2.90	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	D	<5.0	0.80	2.3	136	<0.50	1,150	<0.050	307,000	<0.50	6.79	<0.50	1,180	<0.30	<20	464,000	8,290	10.3	8.44	<2.0	3,820,000	<0.050	<5.0	9.49	<0.50	3.7
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-12	D	<5.0	<0.50	3.5	116	<0.50	2,190	0.086	346,000	<0.50	7.11	<0.50	1,500	<0.30	<20	763,000	7,360	9.1	8.17	<2.0	6,240,000	0.280	<5.0	9.78	<0.50	4.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Dec-12	D	18.2	<0.50	<3.0	36.2	<0.50	2,490	<0.050	140,000	<0.50	0.489	6.18	<10	<0.30	64	438,000	17.9	6.0	20.8	<2.0	4,100,000	<0.050	<5.0	1.72	1.19	14.1
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	---	Well Not Sampled																								
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13	D	13.9	<0.50	2.6	59.5	<0.50	630	<0.050	106,000	<0.50	4.38	<0.50	688	<0.30	<20	154,000	2,870	<2.0	3.57	<2.0	1,250,000	<0.050	<5.0	2.36	0.52	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	D	<5.0	<0.50	2.4	192	<0.50	1,120	0.117 J	317,000	<0.50	8.81	<0.50	2,280	<0.30	21	482,000	8,040	<2.0	13.4	<2.0	3,640,000	<0.050	<5.0	2.59	<0.50	3.1 J
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	T	94.4	<0.50	2.7	200	<0.50	1,170	0.140 J	318,000	<0.50	8.86	0.80	2,890 J	<0.30	21	487,000	8,640	<2.0	13.1	<2.0	3,710,000	<0.050	<5.0	2.75	<0.50	4.7 J
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	D	7.3	<0.50	<2.0	176	<0.50	1,500	0.095	422,000	<0.50	6.65	0.61	9,860	<0.30	<20	773,000	12,300	<2.0	8.13	<2.0	5,460,000	<0.050	<5.0	5.29	<0.50	8.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	T	1,340	<0.50	<3.0	204	<0.50	1,540	0.183	447,000	1.36	6.89	4.41	12,700	1.92	<20	809,000	12,500	2.5	10.9	<2.0	5,840,000	<0.050	66.9	5.83	3.17	9.9
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	D	<5.0	<0.50	<2.0	92.2	<0.50	1,680	<0.050	320,000	<0.50	1.83	<0.50	5,690	<0.30	<20	650,000	4,000	<2.0	5.27	<2.0	5,270,000	<0.050	<5.0	3.15	<0.50	5.5
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	T	490	<0.50	<2.0	94.8	<0.50	1,820	0.118	304,000	<0.50	5.20	1.56	5,690	0.83	<20	635,000	3,300	<2.0	9.82	<2.0	5,180,000	<0.050	25.5	2.41	1.52	10.7
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	D	<5.0	<0.50	<2.0	60.0	<0.50	1,250	<0.050	283,000	<0.50	4.99	<0.50	5,330	<0.30	<20	543,000	3,000	<2.0	7.08	<2.0	3,800,000	<0.050	<5.0	1.53	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	T	485	<0.50	<2.0	69.1	<0.50	1,280	0.115	290,000	<0.50	6.20	1.91	7,980	0.84	<20	546,000	3,320	<2.0	9.34	<2.0	3,820,000	<0.050	22.9	1.70	1.13	5.9
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	D	<5.0	<0.50	<2.0	115	<0.50	1,200	0.104	216,000	<0.50	9.09	<0.50	6,520	<0.30	28	489,000	2,870	<2.0	9.41	<2.0	3,890,000	<0.050	<5.0	0.552	<0.50	4.2
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	T	48.1	<0.50	<2.0	92.0	<0.50	1,110	0.134	160,000	<0.50	8.01	<0.50	2,660	<0.30	23	359,000	1,960	<2.0	8.74	<2.0	2,780,000	<0.050	<5.0	0.392	<0.50	4.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	D	<5.0	<0.50	<2.0	138	<0.50	1,570	<0.050	398,000	<0.50	3.12	<0.50	19,700	<0.30	<20	887,000	7,840	<2.0	5.63	<2.0	6,920,000	<0.050	<5.0	1.04	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	T	41.3	<0.50	<2.0	134	<0.50	1,610	<0.050	381,000	<0.50	4.62	<0.50	18,200	<0.30	<20	841,000	6,980	<2.0	6.71	<2.0	6,400,000	<0.050	<5.0	0.991	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	D	<5.0	<0.50	<2.0	68.1	<0.50	850	<0.050	156,000	<0.50	1.11	<0.50	12,400	<0.30	<20	274,000	2,160	<2.0	10.8	<2.0	2,290,000	<0.050	<5.0	0.309	<0.50	5.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	T	345	<0.50	<2.0	73.5	<0.50	840	<0.050	153,000	<0.50	1.90	1.19	18,500	0.51	<20	276,000	2,400	<2.0	9.68	<2.0	2,240,000	<0.050	14.9	0.423	0.75	5.3
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	D	<5.0	<0.50	<2.0	63.3	<0.50	750	<0.050	107,000	<0.50	0.789	0.54	7,940	<0.30	<20	214,000	892	<2.0	1.71	<2.0	1,590,000	<0.050	<5.0	0.314	<0.50	7.5
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	T	582	<0.50	<2.0	87.3	<0.50	760	0.096	79,300	0.72	8.10	1.76	16,300	0.88	<20	166,000	4,270	<2.0	9.97	<2.0	1,370,000	<0.050	23.5	0.424	1.37	8.6
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Jun-15	D	<5.0	<0.50	<2.0	75.8	<0.50	1,380	<0.050	148,000	<0.50	0.632	<0.50	8,160	<0.30	<20	355,000	1,450	<2.0	1.19	<2.0	3,050,000	<0.050	<5.0	0.175	<0.50	3.1
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Jun-15	T	1,940	<0.50	2.8	207	<0.50	1,700	0.205	258,000	1.88	5.39	3.72	25,000	2.33	<20	621,000	2,950	<2.0	10.0	<2.0	4,770,000	<0.050	70.3	0.685	3.43	10.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	D	<5.0	<0.50	<2.0	109	<0.50	2,340	<0.050	345,000	<0.50	0.700	<0.50	20,000	<0.30	28	888,000	3,730	<2.0	2.35	<2.0	6,360,000	<0.050	<5.0	0.574	<0.50	3.2
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	T	682	<0.50	<2.0	117	<0.50	2,270	0.114	325,000	1.22	2.61	1.82	24,500	0.98	28	835,000	3,680	<2.0	5.92	<2.0	6,030,000	<0.050	35.6	0.698	1.88	6.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	D	<5.0	<0.50	<2.0	101	<0.50	1,100	<0.050	338,000	<0.50	0.343	<0.50	13,300	<0.30	25	531,000	997	<2.0	0.72	<2.0	3,740,000	<0.050	<5.0	0.338	<0.50	6.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	T	9.3	<0.50	<2.0	105	<0.50	1,090	<0.050	322,000	<0.50	0.602	<0.50	16,800	<0.30	25	495,000	1,150	<2.0	1.19	<2.0	3,580,000	<0.050	<5.0	0.378	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Mar-16	D	<5.0	<0.50	<2.0	44.8	<0.50	780	<0.050	77,600	0.84	0.472	0.51	6,490	<0.30	<20	155,000	367	<2.0	0.61	<2.0	1,540,000	<0.050	<5.0	0.133	<0.50	4.8
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Mar-16	T	27.5	<0.50	<2.0	47.7	<0.50	810	<0.050	60,800	<0.50	1.39	<0.50	6,740	<0.30	<20	127,000	529	<2.0	1.39	<2.0	1,450,000	<0.050	<5.0	0.151	<0.50	3.1
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	D	<5.0	<0.50	<2.0	163	<0.50	1,550	<0.050	245,000	<0.50	0.181	<0.50	15,600	<0.30	24	607,000	1,320	<2.0	<0.50	<2.0	4,710,000	<0.050	<5.0	0.170	<0.50	7.2
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	T	36.6	<0.50	<2.0	167	<0.50	1,870	<0.050	265,000	<0.50	0.489	<0.50	16,600	<0.30	26	647,000	1,540	<2.0	0.78	<2.0	4,990,000	<0.050	<5.0	0.189	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	D	<5.0	<0.50	<2.0	94.5	<0.50	1,700	<0.050	182,000	<0.50	0.467	<0.50	8,110	<0.30	<20	475,000	1,170	<2.0	0.80	<2.0	3,880,000	<0.050	<5.0	0.266	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	T	836	<0.50	<2.0	117	<0.50	1,600	0.109	203,000	0.93	3.11	2.77	14,700	1.68	25	537,000	1,590	<2.0	5.11	<2.0	4,220,000	<0.050	42.2	0.500	2.15	8.4
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	D	11.8	<0.50	<2.0	113	<0.50	1,050	<0.050	222,000	<0.50	0.490	<0.50	17,000	<0.30	28	348,000	858	<2.0	<0.50	<2.0	2,620,000	<0.050	<5.0	0.081	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	T	165	<0.50	<2.0	65.6	<0.50	1,130	<0.050	110,000	<0.50	2.48	0.94	8,740	0.50	22	192,000	1,090	<2.0	2.60	<2.0	1,840,000	<0.050	6.7	0.156	<0.50	40.6
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	D	23.7	<0.50	<2.0	55.4	<0.50	960	<0.050	40,900	<0.50	0.168	1.85	2,090	<0.30	<20	108,000	97.3	<2.0	<0.50	<2.0	1,620,000	<0.050	<5.0	<0.050	<0.50	<3.0
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	T	285	<0.50	<2.0	61.6	<0.50	960	<0.050	44,500	<0.50	0.518	1.21	3,430	0.55	<20	116,000	207	<2.0	1.21	<2.0	1,640,000	<0.050	9.4	0.087	0.75	14.6
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	6-Jun-17	D	<5.0	<0.50	<2.0	85.1	<0.50	730	<0.050	50,700	<0.50	0.314	1.98	3,890	0.43	<20	128,000	315	<2.0	0.88	<2.0	1,080,000	<0.050	<5.0	<0.050	<0.50	10.1
P4.9-5	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	6-Jun-17	T	52.5	<0.50	<2.0	109	<0.50	760	0.054	57,800	<0.50	1.39	1.44	7,370	0.58	<20	136,000	711	<2.0	1.86	<2.0	1,100,000	<0.050	<5.0	0.053	<0.50	11.0
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	27-Mar-13	D	1.4	0.164	0.417	251	0.0089	173	0.102	186,000	<0.50	15.3	0.44	5,750	0.053	17.9	264,000	2,860	0.781	7.49	<0.20	670,000	0.0388	<0.20	0.562	0.094	7.6
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Jun-13	D	<5.0	<0.50	<2.0	128	<0.50	1,020	0.375	227,000	<0.50	14.5	0.81	2,210	<0.30	40	360,000	2,880	<2.0	5.16	<2.0	1,720,000	<0.050	<5.0	0.867	<0.50	8.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Jun-13	T	498	<0.50	<2.0	153	<0.50	1,050	0.387	274,000	<0.50	14.2	1.66	3,530	0.30	42	472,000	2,720	<2.0	5.35	<2.0	2,570,000	<0.050	25.5	1.02	2.08	7.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	D	6.1	<0.50	<2.0	212	<0.50	370	<0.050	293,000	<0.50	20.5	<0.50	3,510	<0.30	<20	360,000	5,530	<2.0	5.30	<2.0	1,140,000	<0.050	<5.0	0.278	<0.50	6.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Sep-13	T	352	<0.50	2.0	217	<0.50	350	0.066	300,000	0.60	21.1	1.54	4,930	0.38	<20	350,000	5,350	<2.0	5.52	<2.0	1,020,000	<0.050	15.8	0.304	2.41	9.0 J+
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Dec-13	D	2.6	0.052	0.60	202	<0.010	160	0.050	389,000	<1.0	23.4	<0.40	6,760	<0.10	16.6	473,000	5,250	0.17	4.31	<0.40	859,000	0.0056	<0.40	0.102	0.18	5.6
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Dec-13	T	2,120	0.139 J+	2.28	226	0.059	224	0.191	395,000	2.4	29.7	4.3	11,500	2.33	22.9	493,000	5,880	0.82	7.72	<0.40	952,000	0.0267 J+	86.9	0.414	7.73	20.5
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-14	D	<5.0	<0.50	<2.0	150	<0.50	150	0.051	404,000	<0.50	12.7	0.70	2,310	<0.30	<20	479,000	2,860	<2.0	2.49	<2.0	808,000	<0.050	<5.0	0.120	<0.50	9.0
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-14	T	134	<0.50	<2.0	175	<0.50	180	0.533	398,000	<0.50	26.5	0.97	6,800	<0.30	<20	485,000	5,520	<2.0	4.16	<2.0	853,000	<0.050	6.4	0.137	1.32	12.0
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	D	8.8	<0.50	<2.0	111	<0.50	920	1.09	372,000	<0.50	21.0	3.75	708	<0.30	37	545,000	5,300	<2.0	5.27	<2.0	2,290,000	<0.050	<5.0	0.354	<0.50	19.4
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	11-Jun-14	T	1,700	<0.50	2.8	121	<0.50	880	1.66	393,000	1.47	22.7	6.93	3,700	2.22	38	543,000	5,400	<2.0	6.49	<2.0	2,260,000	<0.050	64.0	0.617	6.17	31.5
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	48.5	<0.50	720	0.208	332,000	<0.50	16.9	0.55	1,370	<0.30	32	458,000	5,500	<2.0	4.70	<2.0	1,760,000	<0.050	<5.0	0.503	<0.50	12.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Sep-14	T	183	<0.50	<2.0	62.0	<0.50	720	0.332	338,000	<0.50	23.9	1.66	4,310	0.40	27	443,000	7,230	2.4	4.77	<2.0	1,590,000	<0.050	9.6	0.584	1.80	14.0
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	2-Dec-14	D	<5.0	<0.50	<2.0	149	<0.50	220	<0.050	444,000	<0.50	25.4	<0.50	9,980	<0.30	<20	568,000	10,300	<2.0	3.26	<2.0	1,170,000	<0.050	<5.0	0.125	1.39	4.5
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	2-Dec-14	T	856	<0.50	9.1	168	<0.50	180	0.587	494,000	1.39	89.9	8.11	15,300	1.32	<20	570,000	14,900	4.4	8.50	<2.0	964,000	<0.050	44.2	0.338	15.2	39.1
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	D	5.1	<0.50	<2.0	131	<0.50	160	0.268	502,000	<0.50	23.5	1.17	4,130	<0.30	<20	570,000	4,400	<2.0	7.07	<2.0	1,190,000	<0.050	<5.0	<0.050	<0.50	32.9
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	10-Mar-15	T	77.4	<0.50	2.9	126	<0.50	190	0.796	510,000	<0.50	42.1	4.2	5,440	<0.30	<20	565,000	4,050	<2.0	9.14	<2.0	1,170,000	<0.050	<5.0	0.085	7.35	44.0
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	88.9	<0.50	420	<0.050	269,000	<0.50	10.0	<0.50	1,610	<0.30	<20	328,000	1,460	<2.0	3.08	<2.0	1,410,000	<0.050	<5.0	0.061	<0.50	5.9
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Jun-15	T	171	<0.50	4.5	98.6	<0.50	470	0.303	257,000	<0.50	29.5	2.31	7,320	0.38	<20	317,000	1,960	2.1	6.50	<2.0	1,430,000	<0.050	7.6	0.137	5.47	14.6
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	D	<5.0	<0.50	8.6	117	<0.50	390	<0.050	374,000	<0.50	30.9	<0.50	8,830	<0.30	<20	419,000	47,300	12.0	1.82	<2.0	1,500,000	<0.050	<5.0	1.68	2.37	6.4
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-15	T	867	0.75	22.7	136	<0.50	390	0.683	354,000	1.64	130	10.8	26,300	1.49	<20	405,000	42,500	22.0	8.77	<2.0	1,470,000	<0.050	47.0	1.94	27.3	38.9
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	D	<5.0	<0.50	<2.0	118	<0.50	290	<0.050	418,000	<0.50	58.5	0.64	8,710	<0.30	<20	525,000	5,380	<2.0	10.5	<2.0	1,610,000	<0.050	<5.0	<0.050	<0.50	20.5
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Dec-15	T	890	<0.50	7.1	139	<0.50	310	0.571	410,000	2.20	80.0	8.8	15,300	1.57	<20	523,000	5,750	7.4	15.4	<2.0	1,590,000	<0.050	71.7	0.315	12.2	43.9
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	D	<5.0	<0.50	<2.0	147	<0.50	290	0.119	402,000	<0.50	31.7	<0.50	21,300	<0.30	28	577,000	3,650	<2.0	7.97	<2.0	1,940,000	<0.050	<5.0	0.123	<0.50	15.9
DUP-3 (P4.9-12S)	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	D	<5.0	<0.50	<2.0	146	<0.50	330	0.138	399,000	<0.50	30.7	<0.50	19,800	<0.30	26	571,000	4,370	<2.0	7.53	<2.0	1,880,000	<0.050	<5.0	0.124	<0.50	22.7
QA/QC RPD										Duplicates	D	---	---	---	1%	---	13%	15%	1%	---	3%	---	7%	---	7%	1%	18%	---	6%	---	3%	---	---	1%	---	35%
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	T	2,280	<0.50	5.6	136	<0.50	270	0.582	405,000	2.82	60.3	11.3	22,700	3.04	26	553,000	4,260	5.8	18.1	<2.0	1,750,000	<0.050	124	0.599	12.7	76.5
DUP-3 (P4.9-12S)	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	29-Feb-16	T	1,160	<0.50	4.5	134	<0.50	290	0.476	417,000	1.73	53.1	6.53	20,400	2.22	23	557,000	5,320	5.1	15.6	<2.0	1,650,000	<0.050	71.2	0.482	9.09	47.9

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
QA/QC RPD										Duplicates	T	65%	---	22%	1%	---	7%	20%	3%	---	13%	54%	11%	31%	12%	1%	22%	13%	15%	---	6%	---	54%	22%	33%	46%
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-May-16	D	<5.0	<0.50	<2.0	83.7	<0.50	390	0.060	406,000	<0.50	50.6	<0.50	5,950	<0.30	<20	504,000	7,970	<2.0	5.25	<2.0	1,580,000	<0.050	<5.0	0.349	<0.50	19.6
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	17-May-16	T	475	<0.50	4.4	93.8	<0.50	410	0.511	393,000	0.93	53.7	3.62	11,300	0.81	<20	484,000	7,110	3.0	7.06	<2.0	1,580,000	<0.050	21.4	0.483	5.06	25.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	D	74.0	<0.50	2.6	68.6	<0.50	430	0.201	261,000	<0.50	15.1	1.23	4,290	0.62	<20	326,000	2,570	<2.0	6.16	<2.0	1,520,000	<0.050	<5.0	0.183	3.41	18.8
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	16-Aug-16	T	<5.0	<0.50	<2.0	78.6	<0.50	380	0.131	281,000	<0.50	15.7	<0.50	1,340	<0.30	<20	340,000	2,980	<2.0	5.34	<2.0	1,500,000	<0.050	<5.0	0.141	1.12	13.2
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	23-Nov-16	D	<5.0	<0.50	<2.0	73.3	<0.50	350	<0.050	327,000	<0.50	22.2	<0.50	1,780	<0.30	<20	392,000	3,370	<2.0	6.28	<2.0	1,570,000	<0.050	<5.0	0.078	<0.50	6.7
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	23-Nov-16	T	440	<0.50	3.0	86.6	<0.50	330	0.225	324,000	0.53	38.2	2.56	4,750	0.85	<20	388,000	4,520	<2.0	8.44	<2.0	1,540,000	<0.050	23.0	0.182	3.43	25.7
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	D	35.1	<0.50	<2.0	80.0	<0.50	170	0.057	389,000	<0.50	32.2	<0.50	1,740	<0.30	<20	453,000	6,280	<2.0	5.3	<2.0	1,420,000	<0.050	<5.0	<0.050	<0.50	14.9
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	15-Mar-17	T	2,400	<0.50	8.4	91.5	<0.50	170	1.08	406,000	3.06	105	13.8	14,200	4.16	<20	470,000	6,830	4.2	20.5	<2.0	1,290,000	0.073	110	0.591	15.1	132
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	D	<5.0	<0.50	<2.0	64.3	<0.50	330	<0.050	234,000	<0.50	13.4	1.70	564	<0.30	<20	306,000	2,990	<2.0	3.68	<2.0	1,460,000	<0.050	<5.0	<0.050	<0.50	9.5
P4.9-12S	Porewater EAZ	P4.9-12	DS	EB	0.6-1.0	0.6	1.0	Weathered Colluvium	---	5-Jun-17	T	181	<0.50	4.4	73.9	<0.50	380	0.084	220,000	<0.50	25.9	2.15	9,050	0.53	<20	295,000	3,170	<2.0	4.56	<2.0	1,570,000	<0.050	9.2	0.167	6.47	16.4
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	20-Mar-13	D	<1.0	0.048	0.086	74.6	<0.0050	59.1	0.0575	65,300	<0.50	1.02	0.40	35	<0.050	0.89	22,200	1,250	0.401	1.28	<0.20	21,400	0.0090	<0.20	0.237	0.151	3.3
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Jun-13	D	<1.0	0.022	0.080	82.5	<0.0050	64.1	0.0102	85,400	<0.50	0.858	0.30	104	<0.050	0.68	31,400	1,980	0.168	0.48	<0.20	27,100	0.0038	<0.20	0.146	0.062	2.2
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Sep-13	D	<1.0	0.035	0.111	148	<0.0050	62.4	0.0444	134,000	<0.50	1.50	0.52	145	<0.050	0.78	49,300	3,230	0.162	0.72	<0.20	36,200	0.0071	<0.20	0.177	0.101	3.6
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Dec-13	D	<1.0	0.480	0.114	133	<0.0050	67.5	0.0805	145,000	<0.50	2.11	0.51	54	<0.050	0.85	52,500	3,200	0.175	1.13	<0.20	39,300	0.0054	<0.20	0.179	0.116	4.5
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-14	D	<1.0	0.220	0.113	181	<0.0050	58.4	0.0469	190,000	<0.50	3.17	0.53	300	0.167	1.06	71,600	4,480	0.144	1.01	<0.20	46,600	0.0024	<0.20	0.190	0.090	4.2
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Jun-14	D	<1.0	0.112	0.175	267	<0.0050	67.8	0.0523	266,000	<0.50	4.58	0.70	597	<0.050	1.35	98,900	5,920	0.153	1.13	<0.20	69,100	<0.0020	<0.20	0.266	0.178	4.0
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	3.5	187	<0.50	1,540	<0.050	630,000	<0.50	9.98	6.42	1,640	<0.30	33	480,000	14,900	<2.0	2.56	<2.0	2,970,000	<0.050	<5.0	1.40	<0.50	6.4
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	2-Dec-14	D	1.4	0.050	4.51	171	<0.0050	282	<0.0050	261,000	<0.50	0.533	<0.20	684	<0.050	6.85	138,000	7,170	0.104	0.37	4.71	455,000	<0.0020	<0.20	0.208	0.191	1.6
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	10-Mar-15	D	<5.0	<0.50	<2.0	153	<0.50	<100	<0.050	306,000	<0.50	0.975	<0.50	967	<0.30	<20	124,000	7,780	<2.0	<0.50	5.5	144,000	<0.050	<5.0	0.163	<0.50	<3.0
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Jun-15	D	<1.0	0.033	0.649	160	<0.0050	77.8	<0.0050	290,000	<0.50	1.75	<0.20	1,440	<0.050	2.59	113,000	6,740	<0.050	<0.20	1.13	115,000	<0.0020	<0.20	0.220	<0.050	2.0
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-15	D	1.3	0.028	0.672	151	<0.0050	71.6	0.0215	325,000	<0.50	2.23	0.21	1,540	<0.050	2.29	121,000	7,290	0.070	0.44	<0.20	131,000	<0.0020	<0.20	0.225	<0.050	5.2
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Dec-15	D	<1.0	0.068	0.176	145	<0.0050	77.4	0.0147	285,000	0.90	3.63	0.43	483	<0.050	1.86	108,000	6,930	0.099	0.42	<0.20	111,000	<0.0020	<0.20	0.108	<0.050	11.1
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	29-Feb-16	D	1.3	0.026	0.217	101	<0.0050	68.4	0.0075	269,000	<0.50	3.14	0.28	1,400	<0.050	1.79	101,000	5,600	<0.050	0.21	0.65	108,000	<0.0020	<0.20	0.303	<0.050	24.1
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	17-May-16	D	<1.0	0.032	0.250	114	<0.0050	61.1	<0.0050	273,000	<0.50	2.57	<0.20	1,170	<0.050	1.88	104,000	6,100	<0.050	0.26	0.22	111,000	<0.0020	<0.20	0.300	<0.050	4.1
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Aug-16	D	<1.0	0.029	0.311	118	<0.0050	77.7	0.0056	322,000	<0.50	3.03	<0.20	1,280	<0.050	1.88	128,000	6,250	0.109	0.41	<0.20	152,000	<0.0020	<0.20	0.343	<0.050	1.6
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	23-Nov-16	D	24.2	0.078	1.42	106	0.0052	78.0	0.0095	286,000	<0.50	3.16	0.31	1,300	0.093	2.20	106,000	5,990	0.739	1.52	<0.20	134,000	<0.0020	1.25	0.325	0.461	1.6
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	15-Mar-17	D	<1.0	0.020	0.341	108	<0.0050	53.6	0.0129	261,000	<0.50	2.70	<0.20	1,520	0.051	1.7	99,800	5,700	0.102	0.4	<0.20	132,000	<0.0020	<0.20	0.334	<0.050	1.5
P4.9-12I	Porewater	P4.9-12	DS	EB	2.6-3.0	2.6	3.0	Weathered Colluvium	---	5-Jun-17	D	<2.0	<0.020	0.34	102	<0.010	59	<0.010	240,000	<1.0	2.43	<0.40	---	<0.10	1.32	93,000	5,480	0.13	<0.40	0.41	123,000	<0.0040	<0.40	0.355	<0.10	<2.0
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	27-Mar-13	D	1.3	0.094	0.207	50.6	<0.0050	59.0	0.0490	53,800	<0.50	1.65	0.39	<30	<0.050	1.12	18,600	784	0.437	1.92	<0.20	20,400	0.0153	<0.20	0.376	0.196	5.2
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Jun-13	D	<1.0	0.052	0.257	190	<0.0050	161	0.0551	140,000	<0.50	6.66	0.26	152	<0.050	4.32	101,000	2,840	0.254	2.38	<0.20	272,000	0.0152	<0.20	0.201	0.094	5.4
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Sep-13	D	<1.0	0.044	0.313	136	<0.0050	69.0	0.0453	138,000	<0.50	5.45	0.55	214	<0.050	1.66	79,600	2,630	0.144	1.82	<0.20	85,700	0.0082	<0.20	0.134	0.054	4.8
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Dec-13	D	<1.0	0.074	0.228	133	0.0064	69.8	0.152	197,000	<0.50	9.82	0.27	284	<0.050	2.06	130,000	3,490	0.083	1.88	<0.20	131,000	0.0107	<0.20	0.0784	<0.050	5.6
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Mar-14	D	<1.0	0.030	0.357	150	0.0056	62.7	0.197	244,000	<0.50	10.3	0.31	1,100	<0.050	2.17	162,000	4,160	0.099	1.61	<0.20	158,000	0.0083	<0.20	0.0733	<0.050	5.5
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	11-Jun-14	D	1.1	0.033	0.425	194	0.0061	67.4	0.204	282,000	<0.50	10.9	0.65	2,050	0.064	2.74	187,000	4,950	0.089	1.81	<0.20	203,000	0.0080	<0.20	0.0890	<0.050	5.2
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Sep-14	D	<2.0	0.049	0.26	197	<0.010	320	0.054	232,000	<1.0	2.21	0.53	1,570	<0.10	10.7	141,000	3,640	0.61	0.93	<0.40	641,000	<0.0040	<0.40	0.214	<0.10	2.8
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	2-Dec-14	D	<1.0	0.039	0.252	133	<0.0050	84.2	0.103	259,000	<0.50	11.0	0.42	1,500	<0.050	3.36	176,000	4,640	0.156	2.12	<0.20	252,000	0.0037	<0.20	0.0715	<0.050	5.5
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Mar-15	D	<5.0	<0.50	<2.0	152	<0.50	<100	0.247	263,000	<0.50	9.04	<0.50	963	<0.30	<20	164,000	5,080	<2.0	1.36	<2.0	187,000	<0.050	<5.0	0.061	<0.50	4.1
DUP-4 (P4.9-12D)	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	10-Mar-15	D	<5.0	<0.50	<2.0	151	<0.50	<100	0.242	262,000	<0.50	8.93	0.9	956	<0.30	<20	161,000	4,960	<2.0	1.6	<2.0	186,000	<0.050	<5.0	0.068	<0.50	8.4
QA/QC RPD										Duplicates	D	---	---	---	1%	---	---	2%	0%	---	1%	---	1%	---	---	2%	2%	---	16%	---	1%	---	---	11%	---	---
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Jun-15	D	<1.0	0.039	0.517	186	0.0069	72.3	0.139	272,000	<0.50	9.13	0.35	3,180	<0.050	2.57	168,000	4,610	0.103	1.48	<0.20	250,000	0.0042	<0.20	0.0719	<0.050	4.1
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Sep-15	D	1.8	0.033	0.146	124	<0.0050	117	0.210	248,000	<0.50	6.75	0.52	414	<0.050	4.20	147,000	4,260	0.156	1.35	<0.20	331,000	0.0060	<0.20	0.0768	<0.050	5.5
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	8-Dec-15	D	<1.0	0.034	0.160	131	<0.0050	77.4	0.344	217,000	<0.50	5.15	0.54	325	<0.050	1.82	114,000	3,170	0.130	1.08	<0.20	172,000	0.0048	<0.20	0.0741	<0.050	5.3
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	29-Feb-16	D	<1.0	0.024	0.168	122	<0.0050	68.2	0.101	190,000	<0.50	3.38	0.55	404	<0.050	1.84	85,500	2,760	0.119	0.79	<0.20	110,000	0.0139	<0.20	0.0896	<0.050	12.3
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	17-May-16	D	<1.0	0.045	0.589	146	<0.0050	64.8	0.0901	226,000	<0.50	4.91	0.52	5,040	<0.050	2.07	112,000	3,800	0.101	1.02	<0.20	161,000	0.0022	<0.20	0.0939	<0.050	6.8
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	16-Aug-16	D	1.5	0.023	0.506	147	<0.0050	76.1	0.0454	235,000	<0.50	5.54	0.21	4,250	<0.050	1.98	129,000	3,430	0.102	1.18	<0.20	240,000	0.0058	<0.20	0.0919	<0.050	3.1
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	23-Nov-16	D	<1.0	0.053	0.441	122	<0.0050	79.6	0.219	195,000	<0.50	3.99	0.25	2,920	<0.050	2.04	90,600	3,000	0.124	0.80	<0.20	149,000	0.0047	<0.20	0.0914	<0.050	3.0
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	15-Mar-17	D	12.5	0.024	0.470	136	<0.0050	66.8	0.148	204,000	<0.50	7.35	0.25	3,560	0.114	2.61	115,000	3,590	0.11	1.17	<0.20	232,000	0.0045	0.3	0.099	0.056	3.9
P4.9-12D	Porewater	P4.9-12	DS	EB	4.6-5.0	4.6	5.0	Colluvium	Weathered Colluvium	5-Jun-17	D													Sediment in sample - not analyzed												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11	---													Well Not Sampled - Insufficient Water for Analysis												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Nov-11	D	6.7	<0.50	<2.0	102	<0.50	930	<0.050	98,400	<0.50	12.4	0.6	190	<0.30	<20	215,000	1,010	3.2	18.5	<2.0	2,010,000	<0.050	<5.0	0.425	2.31	7.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Dec-11	D	19.4	<0.50	<2.0	8.9	<0.50	320	<0.050	10,400	<0.50	1.49	1.81	22	<0.30	<20	17,700	211	<2.0	4.56	<2.0	390,000	<0.050	<5.0	0.225	1.7	4.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jan-12	D	103	<0.50	<2.0	10	<0.50	600	<0.050	9,690	<0.50	0.705	2.58	45	<0.30	<20	16,500	97.8	2.3	0.78	<2.0	433,000	<0.050	<5.0	0.364	1.11	26.7
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	1-Feb-12	D	203	0.174	0.88	6.90	<0.025	343	<0.025	4,110	<2.5	<0.25	<2.5	204	0.30	4.3	7,180	7.0	1.95	<1.0	<1.0	233,000	<0.010	7.5	0.355	1.94	<15
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Mar-12	D	5.3	<0.50	<2.0	15.5	<0.50	630	<0.050	39,400	<0.50	0.154	3.80	<10	<0.30	<20	78,000	51.5	<2.0	1.42	<2.0	962,000	<0.050	<5.0	0.388	0.63	5.4
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Apr-12	D	<5.0	<0.50	<2.0	125	<0.50	300	0.222	63,700	<0.50	10.8	1.56	68	<0.30	<20	80,300	2,650	<2.0	15.2	<2.0	746,000	0.076	<5.0	0.069	<0.50	68.6
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-May-12	D	5.5	<0.50	<2.0	70.8	<0.50	1,130	0.073	148,000	<0.50	0.090	1.73	<10	<0.30	32	291,000	22.3	2.2	1.58	<2.0	2,340,000	<0.050	<5.0	1.60	0.59	12.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	D	7.5	<0.50	<2.0	138	<0.50	1,260	0.135	178,000	1.41	1.23	2.84	63	<0.30	32	370,000	214	3.4	1.84	<2.0	2,960,000	<0.050	<5.0	1.54	0.81	8.1
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	4-Jul-12	D	6.5	<0.50	<2.0	114	<0.50	1,390	0.125	143,000	<0.50	1.05	5.10	11	<0.30	30	283,000	117	2.0	3.88	<2.0	2,590,000	0.057	<5.0	1.10	0.56	8.2
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Aug-12	D	10.8	<0.50	<2.0	192	<0.50	1,880	0.302	285,000	0.69	0.158	7.22	<10	<0.30	48	642,000	32.1	2.1	17.4	<2.0	4,910,000	0.127	<5.0	1.56	0.53	16.5
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-12	---													Well Not Sampled - Insufficient Water for Analysis												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Oct-12	---													Well Not Sampled - Dry												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	8-Nov-12	D	23.7	0.394	1.25	5.95	<0.010	877	<0.010	13,900	<1.0	<0.10	6.08	<30	<0.10	16.9	23,800	1.28	4.21	1.40	<0.40	591,000	0.0100	0.97	1.15	1.60	14.4
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12	D	5.9	<0.50	<2.0	35.6	<0.50	890	0.056	84,800	<0.50	<0.050	4.24	<10	<0.30	<20	162,000	1.71	<2.0	1.03	<2.0	1,450,000	<0.050	<5.0	0.797	0.56	17.6
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Jan-13	D	6.5	<0.50	<2.0	94.0	<0.50	1,020	<0.050	87,800	<0.50	0.228	1.61	<10	<0.30	<20	184,000	74.5	<2.0	0.52	<2.0	1,860,000	<0.050	<5.0	0.576	0.64	11.9
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	25-Feb-13	---													Well Not Sampled												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-13	D	15.4	0.201	0.766	2.85	<0.0050	287	0.0925	2,280	<0.50	0.201	2.48	<30	<0.050	2.44	3,490	7.69	1.67	0.71	0.27	148,000	0.0034	0.62	0.0836	1.23	7.3
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	201	<0.50	1,440	0.305	214,000	<0.50	0.071	2.65	<10	<0.30	30	401,000	31.7	<2.0	2.38	<2.0	2,800,000	0.051	<5.0	0.731	<0.50	12.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	T	13.9	<0.50	<2.0	190	<0.50	1,370	0.272	203,000	0.70	0.124	2.57	18	<0.30	27	377,000	44.2	<2.0	2.29	<2.0	2,630,000	<0.050	<5.0	0.678	0.80	12.7
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	20-Sep-13	---													Well Not Sampled - Insufficient Water for Analysis												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Dec-13	D	<5.0	<0.50	<2.0	231	<0.50	1,460	0.640	237,000	<0.50	0.149	2.59	<10	<0.30	24	524,000	687	<2.0	1.60	<2.0	4,180,000	0.135	<5.0	1.11	<0.50	34.7
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	D	19.5	0.175	0.48	6.48	<0.010	638	<0.010	10,400	<1.0	0.28	2.35	<30	<0.10	5.06	21,900	98.6	1.73	<0.40	<0.40	538,000	<0.0040	0.59	0.268	0.44	5.6
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	T	192	0.188	0.54	8.92	<0.010	612	<0.010	10,100	2.3	0.5	2.5	204	0.11	5.03	21,300	163	2.05	<0.40	<0.40	527,000	0.0044	8.69	0.27	0.92	<6.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	D	7.0	<0.50	<2.0	231	<0.50	1,440	0.101	149,000	<0.50	0.132	2.04	<10	<0.30	<20	322,000	106	<2.0	0.70	<2.0	2,780,000	0.061	<5.0	0.401	<0.50	13.6
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	T	47.6	<0.50	<2.0	214	<0.50	1,450	0.141	134,000	1.36	0.213	1.65	51	<0.30	<20	295,000	88.5	<2.0	0.69	<2.0	2,660,000	0.053	<5.0	0.371	<0.50	10.6
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Sep-14	---													Well Not Sampled - Insufficient Water for Analysis												
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	D	<5.0	<0.50	<2.0	52.5	<0.50	780	<0.050	73,000	<0.50	0.071	1.41	<10	<0.30	<20	151,000	86.0	<2.0	<0.50	<2.0	1,410,000	<0.050	<5.0	0.183	<0.50	24.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	T	44.7	<0.50	<2.0	46.4	<0.50	830	<0.050	62,400	<0.50	0.142	0.63	39	<0.30	<20	128,000	89.0	<2.0	<0.50	<2.0	1,290,000	<0.050	<5.0	0.180	<0.50	9.5
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	D	5.8	0.074	0.257	13.2	<0.0050	149	0.0262	13,300	<0.50	<0.050	1.07	<30	<0.050	2.09	28,300	8.22	0.153	0.22	0.22	339,000	0.0025	0.43	0.0303	0.222	17.2
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	T	123	0.097	0.310	14.8	0.0076	161	0.0310	13,600	1.89	0.161	0.88	132	0.061	2.25	30,200	72.0	0.284	0.24	0.25	347,000	<0.0050	4.88	0.0465	0.531	15.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jun-15	D	37.2	<0.50	<2.0	346	<0.50	1,790	1.35	391,000	<0.50	0.414	1.78	<10	<0.30	27	795,000	3,760	<2.0	2.46	<2.0	5,220,000	0.136	<5.0	0.302	<0.50	51.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-Jun-15	T	6,890	<0.50	<2.0	352	<0.50	1,760	1.25	393,000	15.6	6.74	8.44	5,720	5.02	43	785,000	3,010	<2.0	6.06	<2.0	5,290,000	0.164	94.5	0.548	14.3	382
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-15	D	<5.0	<0.50	<2.0	133	<0.50	2,640	0.293	292,000	1.12	<0.050	1.32	<10	<0.30	46	733,000	3.31	<2.0	1.93	<2.0	5,830,000	<0.050	<5.0	0.690	<0.50	13.1
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-15	T	18.1	<0.50	<2.0	134	<0.50	2,480	0.219	287,000	5.80	0.065	1.28	29	<0.30	38	705,000	22.7	<2.0	<0.50	<2.0	5,730,000	<0.050	<5.0	0.470	<0.50	5.2
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	D	7.0	0.152	0.351	6.00	<0.0050	310	0.0063	6,960	<0.50	<0.050	0.96	<30	<0.050	10.9	13,100	0.54	0.459	<0.20	0.24	365,000	<0.0020	<0.20	0.0361	0.447	14.7
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	T	2,320	0.201	0.804	28.1	0.188	296	0.110	6,650	4.40	1.81	9.17	1,450	3.10	12.9	13,100	1,110	2.52	1.70	0.31	342,000	0.0130	48.7	0.637	3.43	41.5
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Mar-16	D	10.6	0.080	0.251	4.27	<0.0050	174	0.0190	5,920	<0.50	0.140	1.36	<30	<0.050	3.95	10,700	1.60	0.411	0.38	<0.20	230,000	<0.0020	<0.20	0.0349	0.408	8.1
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Mar-16	T	407	0.103	0.347	7.26	0.0331	178	0.0334	5,870	1.54	0.564	1.45	268	0.628	4.34	11,500	318	1.13	0.48	<0.20	242,000	0.0073	9.98	0.149	1.02	18.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	D	25.2	<0.50	<2.0	185	<0.50	270	0.702	152,000	<0.50	<0.050	2.52	<10	<0.30	<20	264,000	389	<2.0	1.86	<2.0	1,150,000	<0.050	<5.0	<0.050	<0.50	61.1
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	T	50.6	<0.50	<2.0	188	<0.50	330	0.794	160,000	0.63	0.087	2.58	34	<0.30	<20	279,000	458	<2.0	2.05	<2.0	1,200,000	0.059	<5.0	0.051	<0.50	64.3
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	D	8.1	<0.50	<2.0	213	<0.50	2,270	0.763	309,000	1.02	<0.050	2.00	<10	<0.30	40.0	756,000	19.2	<2.0	0.75	<2.0	5,500,000	0.056	<5.0	0.332	<0.50	22.1
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	T	101	<0.50	<2.0	238	<0.50	2,590	1.21	334,000	1.65	0.384	3.29	87	<0.30	45	826,000	157	<2.0	<0.50	<2.0	6,130,000	0.058	5.0	0.411	<0.50	45.5
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Nov-16	D	5.3	0.088	0.21	19.9	<0.010	512	0.017	49,400	<1.0	<0.10	0.60	<60	<0.10	21.4	104,000	1.08	0.33	<0.40	<0.40	926,000	<0.0040	<0.40	0.0722	0.33	<2.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	23-Nov-16	T	195	0.100	0.25	19.4	0.014	464	0.026	41,700	<1.0	0.28	<1.0	191	0.28	19.7	86,000	123	0.66	<0.40	<0.40	907,000	<0.010	6.48	0.134	0.73	<6.0
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	D	10.8	0.072	0.208	9.15	<0.0050	239	0.0109	7,810	<0.50	<0.050	0.75	<30	0.088	5.87	15,800	15.5	0.258	<0.20	<0.20	254,000	0.0029	<0.20	0.0296	0.397	16.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	T	1,000	0.204	0.382	15.5	0.0812	256	0.0337	8,170	2.80	0.413	1.46	503	1.1	6.71	16,600	178	0.576	0.64	<0.20	255,000	0.0075	19.3	0.236	1.4	61
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	D	9.2	0.036	0.264	48.3	0.0102	123	0.219	59,100	<0.50	<0.050	2.35	<30	<0.050	8.99	91,200	311	0.094	0.54	0.20	515,000	0.0123	<0.20	0.0245	0.205	12.8
P5-3S	Porewater EAZ	P5-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	T	49.6	0.056	0.176	58.2	0.0136	138	0.187	56,900	0.61	0.090	0.92	43	0.051	10.0	93,000	388	0.128	0.62	0.28	508,000	0.0152	1.55	0.0340	0.324	11.8
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11	---													Well Not Sampled												
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Oct-11	D	<5.0	<0.50	<2.0	69.2	<0.50	250	0.241	42,600	<0.50	1.52	0.77	<10	<0.30	<20	36,100	3,280	5.9	7.74	<2.0	821,000	0.058	<5.0	0.409	0.55	122
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Nov-11	D	5.3	<0.50	<2.0	112	<0.50	200	0.683	68,100	0.67	6.18	3.87	<10	<0.30	<20	59,100	5,320	<2.0	26.9	<2.0	713,000	0.092	<5.0	0.183	<0.50	274
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Dec-11	D	300	<0.50	<2.0	105	<0.50	630	0.377	81,300	<0.50	4.9	0.54	240	<0.30	<20	144,000	3,690	2.4	11.2	<2.0	1,340,000	0.072	12.8	0.296	1.18	4,400
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	D	<5.0	<0.50	<2.0	126	<0.50	1,140	1.46	205,000	<0.50	16.4	0.66	<10	<0.30	27	316,000	10,900	2.4	17.2	<2.0	2,610,000	0.096	<5.0	0.602	<0.50	227
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Feb-12	D	<15	0.158	<0.25	52.1	<0.025	326	0.184	45,800	<2.5	7.75	<2.5	<30	<0.25	4.00	50,400	3,310	1.93	7.4	<1.0	779,000	0.043	<1.0	0.228	0.57	52
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	26-Mar-12	D	<6.0	0.425	0.22	23.9	<0.010	235	0.075	19,300	<1.0	2.37	<1.0	<30	<0.10	2.60	24,000	1,270	1.42	13.8	<0.40	361,000	0.0261	<0.40	0.0871	0.30	35.2
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Apr-12	D	<5.0	<0.50	<2.0	428	<0.50	560	0.545	162,000	<0.50	22.3	1.25	50	<0.30	<20	211,000	10,700	<2.0	13.1	<2.0	1,440,000	0.071	<5.0	0.211	<0.50	207
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-May-12	D	<6.0	0.098	0.23	98.1	<0.010	293	0.156	61,900	<1.0	8.67	<1.0	46	<0.10	2.19	70,400	3,080	1.18	5.77	<0.40	666,000	0.0415	<0.40	0.159	0.25	24.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12	D	<5.0	<0.50	<2.0	98.3	<0.50	280	0.173	57,400	<0.50	8.71	0.99	137	<0.30	<20	69,400	2,430	<2.0	4.71	<2.0	617,000	<0.050	<5.0	0.077	<0.50	17.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jul-12	D	5.1	0.095	0.31	122	0.013	324	0.15	70,400	<1.0	11.8	0.67	190	<0.10	1.65	88,600	2,880	0.66	4.9	0.57	750,000	0.0604	<0.40	0.0465	0.23	9.0
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Aug-12	D	<5.0	<0.50	<2.0	211	<0.50	350	0.269	104,000	<0.50	19.4	1.19	86	<0.30	<20	127,000	4,250	<2.0	6.75	<2.0	910,000	0.102	<5.0	0.084	<0.50	22.3
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12	D	8.4	<0.50	<2.0	447	<0.50	430	0.566	246,000	<0.50	46.0	2.28	736	<0.30	<20	313,000	10,900	<2.0	23.8	<2.0	1,510,000	0.101	<5.0	0.109	<0.50	86.6
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Oct-12	D	8.5	<0.50	<2.0	320	<0.50	800	1.55	476,000	<0.50	59.2	2.81	248	<0.30	<20	586,000	21,000	<2.0	28	<2.0	2,660,000	0.147	<5.0	0.247	<0.50	61.9
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	D	<5.0	<0.50	<2.0	160	<0.50	500	0.483	289,000	<0.50	37.9	0.63	1,300	<0.30	<20	348,000	12,600	<2.0	14.4	<2.0	1,890,000	0.072	<5.0	0.176	<0.50	38.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12	D	<5.0	<0.50	<2.0	45.1	<0.50	400	0.069	76,500	<0.50	11.1	1.97	961	<0.30	<20	88,300	3,370	<2.0	3.85	<2.0	812,000	<0.050	<5.0	0.097	<0.50	364
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	D	<5.0	<0.50	<2.0	55.0	<0.50	590	0.072	120,000	<0.50	10.7	0.61	181	<0.30	<20	154,000	4,390	<2.0	3.67	<2.0	1,410,000	<0.050	<5.0	0.100	<0.50	9.4
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	D	3.1	0.120	0.262	38.9	0.0057	261	0.0417	37,300	<0.50	6.35	1.17	77	0.082	1.44	41,900	1,770	0.787	5.46	0.26	503,000	0.0196	<0.20	0.0611	0.196	40.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Jun-13	D	3.6	0.099	0.16	179	0.014	312	0.103	62,600	<1.0	16.5	1.03	165	<0.10	1.76	73,200	3,480	0.69	7.36	<0.40	600,000	0.0333	<0.40	0.0542	0.15	46.4
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Jun-13	T	140	0.123	0.20	160	<0.020	301	0.085	58,600	<1.0	13.9	<1.5	347	0.11	1.79	68,900	2,950	<0.70	9.74	<0.40	581,000	0.0295	6.96	0.0600	<0.60	44.0
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13	D	12.5	<0.50	<2.0	425	<0.50	520	1.02	519,000	<0.50	118	1.19	880	<0.30	<20	553,000	16,700	<2.0	9.40	<2.0	2,270,000	0.087	<5.0	0.055	<0.50	36.8
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13	T	24,200	<0.50	4.2	615	0.83	530	1.33	571,000	43.0	132	42.4	27,900	12.6	<20	568,000	16,300	<2.0	23.4	<2.0	2,300,000	0.234	911	1.67	85.0	240
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	D	5.9	0.081	0.17	80.2	0.018	380	0.109	131,000	<1.0	32.1	0.65	207	<0.10	1.29	128,000	5,190	0.29	4.15	<0.40	1,080,000	0.0302	<0.40	0.0448	<0.10	45.1
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Dec-13	T	1,390	<0.50	<2.0	107	<0.50	420	0.147	152,000	1.48	32.7	3.31	2,050	0.64	<20	147,000	5,930	<2.0	24.9	<2.0	1,150,000	<0.050	79.2	0.174	4.77	605
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	43.8	<0.50	370	0.055	56,800	<0.50	17.3	1.05	37	<0.30	<20	65,200	2,770	<2.0	6.20	<2.0	784,000	<0.050	<5.0	<0.050	<0.50	82.3
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-14	T	446	<0.50	<2.0	48.2	<0.50	370	0.066	50,000	<0.50	16.2	1.59	570	0.31	<20	56,400	2,450	<2.0	11.1	<2.0	710,000	<0.050	20.4	0.061	1.39	68.7
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	D	3.5	0.076	0.40	131	0.011	383	0.032	69,600	<1.0	19.2	0.62	768	<0.10	2.95	79,300	3,390	0.54	2.74	<0.40	842,000	0.0059	<0.40	0.0379	0.22	76.4
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	T	130	0.078 J+	0.40 J+	155	0.019	407	0.056	70,900	<1.0	20.4	<1.0	790	0.11	1.98	80,700	3,390	0.42	2.33	<0.40	828,000	0.0237	8.20	0.0450	0.68	35.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Sep-14	D	<5.0	<0.50	<2.0	307	<0.50	640	0.352	380,000	<0.50	83.2	1.35	1,100	<0.30	<20	425,000	19,700	<2.0	12.0	<2.0	2,220,000	0.055	<5.0	0.070	<0.50	398
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Sep-14	T	603	<0.50	<2.0	320	<0.50	690	0.429	379,000	0.98	80.6	2.70	1,890	0.43	<20	427,000	19,500	<2.0	13.3	<2.0	2,280,000	0.057	37.5	0.130	2.54	507
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	D	<5.0	<0.50	<2.0	93.2	<0.50	540	0.070	140,000	<0.50	21.9	0.99	40.0	<0.30	<20	138,000	6,160	<2.0	2.78	<2.0	1,200,000	<0.050	<5.0	<0.050	<0.50	368
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	T	2,130	<0.50	<2.0	97.4	<0.50	630	0.154	163,000	3.91	27.5	5.52	2,860	0.80	<20	168,000	7,630	<2.0	4.29	<2.0	1,330,000	<0.050	91.6	0.172	5.59	734
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	D	2.5	0.092	0.20	30.6	<0.010	363	0.023	29,800	<1.0	2.17	0.65	<30	<0.10	3.82	40,600	766	0.85	0.62	<0.40	557,000	0.0045	<0.40	0.0508	0.13	516
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	T	4,650	0.258	1.51	80.7	0.195	430	0.095	35,600	6.7	5.13	9.6	7,270	1.99	6.81	51,000	936	1.33	2.69	<0.40	620,000	0.041	245	0.390	15.1	649
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Jun-15	D	<5.0	<0.50	<2.0	234	<0.50	340	<0.050	85,400	<0.50	13.4	<0.50	653	<0.30	<20	101,000	3,320	<2.0	2.03	<2.0	904,000	<0.050	<5.0	<0.050	<0.50	121
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Jun-15	T	115,000	<0.50	29.5	1,110	3.64	350	2.18	128,000	184	172	206	150,000	56.0	98	172,000	8,200	3.2	118	<2.0	1,030,000	0.689	3,470	8.86	379	3,110
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	D	17.3	<0.50	<2.0	249	<0.50	670	1.09	602,000	<0.50	137	0.58	958	<0.30	<20	639,000	22,400	<2.0	9.03	<2.0	3,160,000	0.102	<5.0	<0.050	<0.50	65.8
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-15	T	1,710	<0.50	<2.0	227	<0.50	740	1.71	588,000	2.22	140	3.17	2,890	0.74	<20	665,000	24,200	<2.0	10.4	<2.0	3,000,000	0.133	93.1	0.143	5.49	175
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	64.3	<0.50	570	0.326	101,000	<0.50	19.3	1.21	<10	<0.30	<20	116,000	2,920	<2.0	7.63	<2.0	1,170,000	<0.050	<5.0	<0.050	<0.50	328
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	T	175	<0.50	<2.0	59.9	<0.50	540	0.298	96,000	<0.50	18.6	1.35	316	<0.30	<20	110,000	2,910	<2.0	7.86	<2.0	1,110,000	<0.050	10.4	0.051	0.81	289
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Mar-16	D	2.3	0.079	0.139	20.0	<0.0050	269	0.0415	13,700	<0.50	1.75	0.94	<30	<0.050	2.01	20,200	358	0.580	6.18	<0.20	374,000	0.0099	<0.20	0.0265	0.126	221
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Mar-16	T	157	0.059	0.163	17.2	0.0102	230	0.0282	8,690	0.54	1.69	0.64	225	0.108	0.97	12,100	275	0.599	2.48	<0.20	289,000	0.0095	6.97	0.0339	0.611	78.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	D	1.8	0.106	0.134	42.2	0.0054	236	0.0581	13,700	<0.50	1.93	0.70	<30	<0.050	2.99	17,000	374	0.486	2.77	<0.20	326,000	0.0130	<0.20	0.0359	0.147	48.4
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	T	1,090	0.088	0.369	78.7	0.0497	228	0.123	20,600	1.57	5.02	2.29	1,510	0.759	2.73	24,200	642	0.541	3.31	<0.20	382,000	0.0242	53.1	0.129	3.40	66.9
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	D	2.8	0.182	0.201	173	0.0127	303	0.241	70,200	<0.50	12.5	1.03	<60	<0.050	10.3	93,800	2,280	0.573	3.36	<0.20	900,000	0.0384	<0.20	0.0657	0.129	86.4
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	T	66.0	0.101	0.16	242	0.025	330	0.257	94,400	<1.0	17.3	2.3	172	<0.10	4.65	118,000	3,140	0.48	3.97	<0.40	960,000	0.039	3.11	0.0528	0.30	62.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Nov-16	D	4.1	0.061	0.143	32.2	0.0091	229	0.0565	21,800	<0.50	4.86	1.05	<30	<0.050	0.92	28,200	775	0.395	0.93	<0.20	383,000	0.0154	<0.20	0.0279	0.138	31.8
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	23-Nov-16	T	38.7	0.067	0.137	25.8	0.0077	238	0.0406	15,400	<0.50	3.67	0.64	49	0.060	0.63	19,200	561	0.453	0.85	<0.20	328,000	0.0154	1.43	0.0272	0.245	22.6
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	D	52.8	0.123	0.177	26.9	0.0069	234	0.0893	14,600	<0.50	1.61	1.19	45	0.241	3.47	27,400	268	0.47	1.39	<0.20	362,000	0.0115	2.75	0.0403	0.317	186
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	T	334	0.652	0.291	37.8	0.0173	286	0.168	16,400	0.65	1.82	1.52	485	0.577	5.05	31,400	274	0.732	1.98	<0.20	391,000	0.0135	14.3	0.0704	1.1	221
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	D	1.7	0.117	0.158	10.1	<0.0050	110	0.0188	2,610	<0.50	0.144	2.03	<30	<0.050	0.77	4,370	56.1	1.13	0.27	0.26	139,000	0.0079	<0.20	0.0234	0.237	15.5
P5-3I	Porewater EAZ	P5-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	T	697	0.090	0.286	26.5	0.0342	129	0.0282	3,840	0.66	1.05	1.96	978	0.92	1.28	6,090	117	0.686	0.80	<0.20	156,000	0.0160	44.8	0.0989	2.57	12.0
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	28-Sep-11	---													Well Not Sampled												
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Nov-11	D	<5.0	<0.50	<2.0	94.9	<0.50	650	1.72	171,000	0.55	19.1	1.14	16	<0.30	<20	243,000	12,400	2.4	12.6	<2.0	2,000,000	0.069	<5.0	0.187	<0.50	97.6
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Dec-11	D	12.9	<0.50	<2.0	67	<0.50	2,580	<0.050	262,000	<0.50	12.8	<0.50	1,750	<0.30	69	675,000	5,770	5.1	6.81	<2.0	5,960,000	<0.050	<5.0	1.18	0.54	12.2
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	83.2	<0.50	890	0.415	127,000	<0.50	12	0.79	11	<0.30	22	232,000	6,770	2.3	8.54	<2.0	1,850,000	<0.050	<5.0	0.29	<0.50	760
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	D	<60	<0.20	<1.0	52.1	<0.10	520	<0.10	74,600	<10	7.0	<10	<60	<1.0	11.2	138,000	3,980	2.0	4.6	<4.0	1,170,000	<0.040	<4.0	0.166	<1.0	971
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	D	<6.0	0.09	0.19	109	<0.010	317	0.156	57,100	<1.0	7.47	1.1	<30	<0.10	3.05	68,000	3,870	1.59	5.34	<0.40	629,000	0.0264	<0.40	0.0705	0.23	136
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-May-12	D	<5.0	<0.50	<2.0	178	<0.50	480	0.228	99,000	<0.50	13.3	0.70	32	<0.30	<20	125,000	7,970	<2.0	11.9	<2.0	912,000	0.063	<5.0	0.153	<0.50	219
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jun-12	D	<5.0	<0.50	<2.0	238	<0.50	520	0.299	151,000	<0.50	17.3	0.95	73	<0.30	<20	185,000	10,300	<2.0	7.93	<2.0	1,450,000	<0.050	<5.0	0.171	<0.50	171
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jul-12	D	<5.0	<0.50	<2.0	197	<0.50	560	0.162	140,000	<0.50	17.5	1.11	268	<0.30	<20	169,000	10,700	<2.0	8.98	<2.0	1,290,000	0.091	<5.0	0.144	<0.50	74.2
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Aug-12	D	11.9	<0.50	<2.0	325	<0.50	710	0.251	206,000	<0.50	21.3	1.42	219	<0.30	<20	284,000	11,600	<2.0	9.62	<2.0	1,860,000	0.070	<5.0	0.193	<0.50	68.0
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Sep-12	D	5.7	<0.50	<2.0	237	<0.50	1,570	0.160	370,000	<0.50	30.9	<0.50	829	<0.30	<20	623,000	12,500	<2.0	11.7	<2.0	4,230,000	0.110	<5.0	0.220	<0.50	32.9
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	D	6.5	<0.50	<2.0	178	<0.50	1,640	0.405	378,000	<0.50	10.1	0.89	120	<0.30	<20	607,000	8,760	<2.0	14.2	<2.0	4,490,000	0.052	<5.0	0.245	<0.50	180

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	D	<5.0	<0.50	<2.0	117	<0.50	1,150	0.381	336,000	<0.50	13.3	1.04	64	<0.30	<20	521,000	10,300	<2.0	12.7	<2.0	3,580,000	<0.050	<5.0	0.232	<0.50	886
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-12	D	<5.0	<0.50	<2.0	47.9	<0.50	650	0.085	137,000	<0.50	13.5	3.17	117	<0.30	<20	181,000	6,670	<2.0	5.01	<2.0	1,390,000	<0.050	<5.0	0.107	<0.50	17.7
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	D	3.5	0.066	0.20	85.8	0.016	337	0.100	92,800	<1.0	15.7	0.50	265	<0.10	1.59	115,000	3,150	0.530	3.15	<0.40	859,000	0.0257	<0.40	0.0681	0.16	137
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	D	2.3	0.113	0.27	30.4	<0.010	329	0.130	43,300	<1.0	3.35	1.56	<30	<0.10	1.66	52,700	1,770	0.93	2.84	<0.40	629,000	0.0079	<0.40	0.0467	0.17	47.9
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-13	D	1.5	0.119	0.305	55.2	<0.0050	320	0.0283	39,400	<0.50	4.34	0.98	281	<0.050	1.44	44,500	1,440	0.750	1.95	<0.20	515,000	0.0073	<0.20	0.0372	0.173	26.7
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	265	<0.50	700	0.366	292,000	<0.50	43.2	1.10	130	<0.30	<20	372,000	10,300	<2.0	9.53	<2.0	1,870,000	<0.050	<5.0	0.067	<0.50	18.9
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	D	5.4	<0.50	<2.0	98.7	<0.50	400	0.094	205,000	<0.50	32.3	0.52	1,040	<0.30	<20	226,000	7,750	<2.0	5.75	<2.0	1,530,000	<0.050	<5.0	<0.050	<0.50	9.2
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	57.4	<0.50	390	0.215	102,000	<0.50	13.6	1.44	26	<0.30	<20	108,000	4,420	<2.0	4.66	<2.0	921,000	<0.050	<5.0	<0.050	<0.50	30.4
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	D	<5.0	<0.50	<2.0	69.4	<0.50	740	0.169	77,300	<0.50	4.37	1.30	<10	<0.30	<20	141,000	2,270	<2.0	2.78	<2.0	1,350,000	0.053	<5.0	0.125	<0.50	48.2
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-Sep-14	D	5.2	<0.50	<2.0	226	<0.50	1,310	0.296	294,000	<0.50	22.5	2.99	<10	<0.30	<20	434,000	12,800	<2.0	16.8	<2.0	2,710,000	0.071	<5.0	0.260	<0.50	49.2
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Dec-14	D	<5.0	<0.50	<2.0	95.1	<0.50	1,060	0.113	207,000	<0.50	8.70	1.04	<10	<0.30	21	324,000	5,670	<2.0	3.02	<2.0	2,650,000	<0.050	<5.0	0.327	<0.50	15.7
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Mar-15	D	4.9	0.138	0.41	34.3	<0.010	702	0.036	74,600	<1.0	0.52	1.32	<60	<0.10	11.4	148,000	347	0.63	0.93	<0.40	1,440,000	0.0123	<0.40	0.294	0.27	8.3
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Jun-15	D	17.2	<0.50	<2.0	103	<0.50	1,090	<0.050	125,000	<0.50	3.35	0.71	<10	<0.30	23	267,000	1,160	<2.0	0.74	<2.0	2,550,000	<0.050	<5.0	0.339	<0.50	8.7
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-15	D	10.5	<0.50	<2.0	132	<0.50	1,240	2.39	569,000	<0.50	42.8	0.74	<10	<0.30	24	750,000	14,500	<2.0	8.68	<2.0	4,300,000	0.078	<5.0	0.315	<0.50	46.8
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	26.2	<0.50	1,160	0.081	91,500	<0.50	0.576	1.35	<10	<0.30	<20	197,000	217	<2.0	0.95	<2.0	1,890,000	<0.050	<5.0	0.250	0.57	13.3
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	3-Mar-16	---	Well Not Sampled - Infilled																								
P5-3D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	18-May-16	---	Well Destroyed																								
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Dec-11	D	6.8	<0.50	<2.0	72.8	<0.50	1,110	0.112	91,900	<0.50	15.6	0.83	<10	<0.30	22	138,000	2,010	4.3	21.3	<2.0	2,050,000	0.332	<5.0	7.74	<0.50	10.3
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jan-12	D	<5.0	<0.50	<2.0	108	<0.50	970	0.101	89,700	<0.50	26.3	<0.50	10	<0.30	20	153,000	3,150	3.1	23.3	<2.0	1,610,000	0.188	<5.0	3.06	<0.50	41.1
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	2-Feb-12	D	<60	<0.20	<1.0	76.9	<0.10	1,470	0.33	150,000	<10	8.7	<10	210	<1.0	37.3	346,000	1,060	3.1	8.1	<4.0	3,000,000	0.201	<4.0	1.8	1.1	<60
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	26-Mar-12	D	<5.0	<0.50	<2.0	98.3	<0.50	1,260	0.112	142,000	<0.50	6.30	<0.50	17	<0.30	32	311,000	974	2.3	8.08	<2.0	2,550,000	0.072	<5.0	1.80	<0.50	91.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Apr-12	D	6.2	<0.50	8.4	112	<0.50	2,040	<0.050	236,000	<0.50	7.41	0.59	16,300	<0.30	55	514,000	2,180	7.2	8.13	<2.0	4,390,000	<0.050	<5.0	6.06	1.13	289
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-May-12	D	9.6	<0.50	<3.0	57.3	<0.50	1,850	<0.050	208,000	<0.50	0.971	0.56	1,070	<0.30	65	496,000	478	5.7	2.85	<2.0	4,450,000	<0.050	<5.0	4.81	0.96	18.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jun-12	D	7.1	<0.50	4.3	82.5	<0.50	1,800	<0.050	255,000	<0.50	4.18	<0.50	6,580	<0.30	50	464,000	1,110	5.9	3.16	<2.0	4,330,000	<0.050	<5.0	5.38	0.99	18.0 J
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Jul-12	D	5.6	<0.50	3.2	84.5	<0.50	1,640	0.073	211,000	<0.50	2.14	<0.50	5,330	<0.30	39	387,000	1,060	3.1	1.66	<2.0	3,180,000	<0.050	<5.0	3.10	0.98	6.6
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Aug-12	D	12.0	<0.50	<3.0	119	<0.50	1,880	<0.050	240,000	<0.50	3.31	<0.50	1,660	<0.30	44	446,000	1,120	3.6	4.27	<2.0	4,100,000	0.135	<5.0	4.35	<0.50	11.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Sep-12	D	6.4	<0.50	<4.0	160	<0.50	2,160	<0.050	338,000	<0.50	2.23	<0.50	3,500	<0.30	50	657,000	1,520	4.9	3.29	<2.0	5,090,000	<0.050	<5.0	5.86	1.65	8.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Oct-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Nov-12	D	<5.0	<0.50	<2.0	123	<0.50	1,780	0.058	259,000	<0.50	2.59	0.51	1,970	<0.30	44	589,000	616	2.1	63.2	<2.0	4,650,000	<0.050	<5.0	3.18	0.61	40.1
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	2.0	128	<0.50	1,740	<0.050	246,000	<0.50	4.13	<0.50	7,430	<0.30	36	487,000	943	2.9	3.90	<2.0	3,210,000	<0.050	<5.0	2.86	<0.50	10.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	104	<0.50	1,450	<0.050	223,000	<0.50	2.54	<0.50	4,370	<0.30	32	451,000	748	2.0	2.69	<2.0	2,950,000	<0.050	<5.0	2.31	<0.50	6.5
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	69.6	<0.50	1,050	0.076	111,000	<0.50	0.65	0.93	35	<0.30	23	231,000	163	3.2	21.4	<2.0	1,890,000	<0.050	<5.0	3.02	<0.50	58.1
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	D	6.5	0.68	<2.0	86.9	<0.50	1,750	<0.050	208,000	<0.50	2.98	1.93	1,490	<0.30	35	381,000	682	4.7	51.8	<2.0	2,690,000	<0.050	<5.0	3.26	0.74	71.3
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-13	T	43,500	1.04	22.3	304	1.38	1,780	1.46	592,000	37.2	29.0	59.8	95,800	66.5	118	388,000	1,330	8.6	57.5	<2.0	2,630,000	0.383	1,130	14.4	194	645
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13	D	8.5	<0.50	2.2	148	<0.50	2,340	<0.050	326,000	<0.50	2.54	1.93	5,660	<0.30	52	697,000	836	5.4	2.84	<2.0	4,690,000	<0.050	<5.0	2.85	0.62	5.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Dec-13	D	<5.0	<0.50	<2.0	78.3	<0.50	2,140	0.095	305,000	<0.50	1.30	<0.50	349	<0.30	65	709,000	345	3.7	2.38	<2.0	5,470,000	<0.050	<5.0	2.48	<0.50	5.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13	T	1,790	0.52	2.2	174	<0.50	2,490	0.118	381,000	1.72	5.25	4.79	6,600	1.82	58	734,000	1,240	4.6	8.69	<2.0	5,170,000	<0.050	98.9	3.39	8.89	26.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Dec-13	T	3,950	<0.50	<5.0	133	<0.50	1,550	0.267	297,000	4.78	4.47	9.84	10,600	3.59	45	599,000	527	3.2	8.36	<3.0	4,160,000	0.052	242	3.17	17.3	50.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	D	6.0	<0.50	2.4	102	<0.50	1,440	<0.050	272,000	<0.50	3.82	<0.50	12,000	<0.30	36	561,000	1,100	4.2	5.32	<2.0	3,520,000	<0.050	<5.0	2.44	1.08	8.4
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	T	8,210	<0.50	6.1	140	<0.50	1,390	0.603	352,000	8.99	7.61	11.3	28,700	11.7	47	567,000	841	3.8	15.1	<2.0	3,550,000	0.090	244	4.04	34.8	85.2
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Jun-14	D	<5.0	<0.50	<2.0	99.0	<0.50	1,310	0.085	208,000	<0.50	1.85	0.56	7,190	<0.30	40.0	414,000	772	2.1	2.04	<2.0	2,660,000	<0.050	<5.0	1.35	<0.50	5.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	13-Jun-14	T	Well Not Sampled - Insufficient Water for Analysis																								
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	18-Sep-14	D	<5.0	<0.50	5.2	83.3	<0.50	2,700	<0.050	378,000	<0.50	2.66	<0.50	4,160	<0.30	82	937,000	1,260	<2.0	2.46	<2.0	7,270,000	<0.050	<5.0	1.38	0.61	3.7
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	18-Sep-14	T	11,200	1.08	20.6	126	<0.50	2,440	0.705	384,000	14.9	10.9	35.4	44,200	19.7	102	894,000	2,110	4.8	20.8	<2.0	6,890,000	0.093	524	3.75	54.2	88.6
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	4-Dec-14	D	<5.0	<0.50	2.4	137	<0.50	1,390	<0.050	288,000	<0.50	3.25	<0.50	13,500	<0.30	31	620,000	2,050	<2.0	13.7	<2.0	3,680,000	<0.050	<5.0	3.29	0.60	5.4
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	2-Dec-14	T	2,500	<0.50	9.3	127	<0.50	1,480	0.293	251,000	3.99	6.12	15.5	54,600	2.74	35	622,000	1,600	4.2	7.04	<2.0	3,600,000	<0.050	93.0	1.61	11.3	28.7
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	9-Mar-15	D	<5.0	<0.50	<2.0	120	<0.50	1,100	<0.050	263,000	<0.50	0.692	<0.50	6,120	<0.30	29	522,000	1,330	<2.0	0.92	<2.0	3,450,000	<0.050	<5.0	0.631	<0.50	4.2
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	13-Mar-15	T	4,430	0.54	9.2	161	<0.50	1,150	0.432	311,000	6.86	6.67	16.3	56,800	5.03	37	577,000	1,370	4.4	9.97	<2.0	3,690,000	0.071	188	2.54	21.3	37.5
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	18-Jun-15	D	<5.0	<0.50	<2.0	121	<0.50	1,370	<0.050	221,000	<0.50	1.39	<0.50	11,500	<0.30	28	451,000	907	<2.0	2	<2.0	3,520,000	<0.050	<5.0	1.33	<0.50	<3.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	15-Jun-15	T	1,870	<0.50	13.1	190	<0.50	1,590	0.212	228,000	2.88	4.08	7.78	61,100	2.80	43	457,000	727	3.8	6.23	<2.0	3,730,000	<0.050	90.0	1.95	10.7	23.4
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	9-Sep-15	D	<5.0	<0.50	<2.0	138	<0.50	1,430	<0.050	258,000	<0.50	2.61	0.65	4,640	<0.30	35	563,000	1,380	<2.0	3.69	<2.0	3,880,000	<0.050	<5.0	1.41	<0.50	7.8
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	9-Sep-15	T	10,700	0.72	9.4	203	<0.50	1,460	0.558	333,000	18.8	11.8	36.2	79,800	22.3	51	550,000	1,740	5.9	26.1	<2.0	3,800,000	0.092	336	6.69	66.1	101
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	9-Dec-15	D	<5.0	<0.50	<2.0	172	<0.50	1,010	<0.050	389,000	<0.50	2.85	<0.50	47,100	<0.30	20.0	763,000	2,780	<2.0	4.44	<2.0	3,810,000	<0.050	<5.0	0.982	<0.50	10.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	10-Dec-15	T	1,170	<0.50	3.1	194	<0.50	1,000	0.076	392,000	1.68	2.93	4.49	59,300	0.78	26	748,000	2,630	<2.0	5.56	<2.0	3,440,000	<0.050	56.1	0.777	4.84	84.4
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	1-Mar-16	T	7,060	0.67	6.1	170	<0.50	870	0.533	306,000	10.7	8.63	20.2	58,100	36.9	34	437,000	1,590	3.6	15.2	<2.0	2,850,000	0.107	317	3.28	36.8	88.9
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	2-Mar-16	D	<5.0	<0.50	<2.0	119	<0.50	980	<0.050	259,000	<0.50	1.77	<0.50	34,000	<0.30	23	505,000	1,870	<2.0	2.07	<2.0	3,050,000	<0.050	<5.0	0.826	<0.50	4.7
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	19-May-16	D	<5.0	<0.50	2.8	133	<0.50	1,220	<0.050	228,000	<0.50	1.88	0.72	19,800	<0.30	31	475,000	1,370	3.4	2.22	<2.0	3,300,000	<0.050	<5.0	1.35	0.66	<3.0
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	19-May-16	T	15,200	0.83	19.6	270	0.65	1,360	1.54	356,000	22.7	24.7	66.1	188,000	28.9	58	477,000	1,890	11.3	39.6	<2.0	3,330,000	0.290	464	10.9	85.4	206
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	17-Aug-16	T	2,930	<0.50	3.5	132	<0.50	2,710	0.151	332,000	2.39	2.78	7.01	25,200	4.50	86	815,000	706	5.3	19.6	<2.0	6,100,000	<0.050	125	2.12	10.6	73.6
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	19-Aug-16	D	<5.0	<0.50	<2.0	142	<0.50	2,360	<0.050	316,000	<0.50	0.604	<0.50	2,350	<0.30	67	734,000	513	<2.0	3.09	<2.0	5,500,000	<0.050	<5.0	0.983	<0.50	3.1
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	2.1	168	<0.50	1,220	<0.050	342,000	<0.50	2.93	<0.50	23,800	<0.30	24	607,000	2,790	<2.0	2.12	<2.0	3,970,000	<0.050	<5.0	0.482	<0.50	3.7
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	21-Nov-16	T	14,700	<0.50	10.2	338	0.97	1,260	0.583	496,000	10.6	17.2	36.6	135,000	28.4	45	610,000	5,290	6.7	17.3	<2.0	4,050,000	0.151	234	6.49	50.5	185
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	13-Mar-17	D	50.8	<0.50	2.6	95.1	<0.50	1,480	<0.050	221,000	<0.50	2.34	1.07	12,600	<0.30	43	514,000	1,630	4.6	2.32	<2.0	4,180,000	<0.050	<5.0	2.09	0.95	3
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	13-Mar-17	T	17,100	1.46	13.8	176	0.65	1,540	0.425	301,000	13.9	9.43	33.4	53,900	22.1	65	600,000	1,850	5.1	15.4	<2.0	4,390,000	0.112	404	4.25	43.6	138
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	7-Jun-17	D	<5.0	<0.50	<2.0	74.1	<0.50	1,280	<0.050	161,000	<0.50	0.826	<0.50	6,260	<0.30	21	287,000	1,310	<2.0	<0.50	<2.0	2,630,000	<0.050	<5.0	0.923	<0.50	4.1
P5-7S	Porewater EAZ	P5-7	DS	EB	0.2-0.5	0.2	0.4	Weathered Colluvium	---	6-Jun-17	T	8,270	<0.50	6.9	126	<0.50	1,570	0.206	203,000	7.75	4.99	19.9	34,900	14.1	43	303,000	1,720	4.2	9.87	<2.0	2,930,000	0.076	262	1.91	22.9	44.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Dec-11	D	<5.0	<0.50	<2.0	79	<0.50	270	0.381	35,100	<0.50	17.7	2.22	5,340	<0.30	<20	87,300	1,240	<2.0	14.7	<2.0	650,000	0.196	<5.0	0.085	<0.50	66.3
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jan-12	D	<6.0	0.038	0.19	55.5	<0.010	272	0.046	45,100	<1.0	7.84	<1.0	2,000	<0.10	8.01	113,000	787	<0.10	5.02	<0.40	674,000	0.0423	<0.40	0.01	<0.10	39.2
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Feb-12	D	<15	<0.050	0.35	56.9	<0.025	235	0.121	45,700	<2.5	6.91	<2.5	7,340	<0.25	6.1	120,000	626	<0.25	5.4	<1.0	728,000	0.056	<1.0	0.013	<0.25	69
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	26-Mar-12	D	<5.0	<0.50	<2.0	50.1	<0.50	390	0.078	50,800	1.39	4.31	<0.50	115	<0.30	<20	131,000	446	<2.0	3.99	<2.0	835,000	<0.050	<5.0	<0.050	<0.50	149
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Apr-12	D	<5.0	<0.50	<2.0	50.9	<0.50	380	<0.050	46,200	<0.50	4.78	2.12	1,990	<0.30	<20	121,000	502	<2.0	5.96	<2.0	789,000	0.056	<5.0	<0.050	<0.50	7,440
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-May-12	D	8.2	<0.50	<2.0	50.7	<0.50	580	0.088	77,800	<0.50	5.46	<0.50	7,210	<0.30	23	208,000	538	<2.0	3.36	<2.0	1,490,000	0.055	<5.0	0.074	<0.50	258
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	4-Jun-12	D	<5.0	<0.50	<2.0	60.6	<0.50	340	0.109	60,100	<0.50	5.16	0.54	5,570	<0.30	<20	154,000	517	<2.0	4.11	<2.0	880,000	0.052	<5.0	<0.050	<0.50	160
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jul-12	D	<5.0	<0.50	<2.0	120	<0.50	340	0.145	105,000	<0.50	8.78	0.63	35,500	<0.30	<20	277,000	915	<2.0	4.98	<2.0	984,000	<0.050	<5.0	<0.050	<0.50	33.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Aug-12	D	<5.0	<0.50	<2.0	157	<0.50	380	0.103	136,000	<0.50	9.74	0.60	51,200	<0.30	<20	355,000	1,050	<2.0	3.12	<2.0	1,260,000	<0.050	<5.0	<0.050	<0.50	52.3
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Sep-12	D	<5.0	<0.50	<2.0	316	<0.50	310	0.225	204,000	<0.50	19.1	<0.50	80,500	<0.30	<20	517,000	2,410	<2.0	10.5	<2.0	1,580,000	<0.050	<5.0	0.058	<0.50	37.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Oct-12	D	10.3	<0.50	<2.0	236	<0.50	590	0.503	228,000	<0.50	18.2	1.46	24,200	<0.30	26	548,000	2,410	<2.0	49.7	<2.0	2,070,000	0.075	<5.0	<0.050	<0.50	188
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Nov-12	D	7.0	<0.50	<2.0	320	<0.50	660	0.622	411,000	<0.50	36.4	0.66	57,300	<0.30	33	967,000	4,540	<2.0	11.4	<2.0	3,000,000	0.051	<5.0	0.092	<0.50	37.0
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Dec-12	D	16.7	<0.50	<2.0	243	<0.50	380	0.478	378,000	<0.50	25.7	2.87	85,700	<0.30	<20	892,000	4,430	<2.0	11.9	<2.0	2,410,000	<0.050	<5.0	0.184	<0.50	36.9
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Jan-13	D	43.7	<0.50	<2.0	175	<0.50	430	0.323	288,000	<0.50	18.0	1.45	32,100	<0.30	<20	665,000	3,010	<2.0	5.90	<2.0	2,430,000	<0.050	<5.0	1.23	<0.50	58.2
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	D	<5.0	<0.50	<2.0	151	<0.50	600	0.139	176,000	<0.50	12.6	0.51	40,800	<0.30	<20	404,000	2,040	<2.0	3.36	<2.0	2,050,000	<0.050	<5.0	0.155	<0.50	12.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	84.3	<0.50	830	0.328	116,000	<0.50	8.76	<0.50	21,400	<0.30	<20	288,000	1,390	<2.0	4.18	<2.0	1,680,000	<0.050	<5.0	0.104	<0.50	13.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Jun-13	T	325	<0.50	2.0	97.2	<0.50	710	0.266	117,000	<0.50	8.37	1.50	42,300	0.40	<20	287,000	1,450	3.6	10.3	<2.0	1,710,000	<0.050	14.9	0.974	2.01	33.4
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	262	<0.50	720	0.069	245,000	<0.50	10.2	<0.50	44,700	<0.30	<20	535,000	2,550	<2.0	4.24	<2.0	2,700,000	<0.050	<5.0	0.110	<0.50	8.9
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Sep-13	T	154	0.52	3.7	273	<0.50	670	0.149	268,000	<0.50	12.3	0.91	53,200	<0.30	<20	561,000	2,620	3.5	4.01	<2.0	2,810,000	<0.050	8.1	0.616	1.48	<15 U
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	D	5.5	<0.50	<2.0	259	<0.50	680	0.153	348,000	<0.50	12.3	<0.50	58,200	<0.30	<20	692,000	3,720	<2.0	3.32	<2.0	3,490,000	<0.050	<5.0	0.107	<0.50	10.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-13	T	25.3	<0.50	<2.0	241	<0.50	640	0.121	336,000	<0.50	11.3	<0.50	59,800	<0.30	<20	680,000	3,600	<2.0	2.77	<2.0	3,370,000	<0.050	<5.0	0.205	<0.50	8.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Mar-14	D	<5.0	<0.50	<2.0	157	<0.50	620	<0.050	233,000	<0.50	9.28	<0.50	28,300	<0.30	<20	434,000	2,800	<2.0	2.48	<2.0	2,790,000	<0.050	<5.0	<0.050	<0.50	8.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Mar-14	T	19.3	<0.50	<2.0	163	<0.50	690	0.065	236,000	<0.50	9.99	<0.50	33,900	1.92	<20	436,000	2,980	<2.0	2.48	<2.0	2,800,000	<0.050	<5.0	0.213	<0.50	6.9
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	D	<5.0	<0.50	<2.0	99.0	<0.50	930	<0.050	98,100	<0.50	3.25	0.85	13,200	<0.30	<20	201,000	1,220	<2.0	1.71	<2.0	1,720,000	<0.050	<5.0	0.053	<0.50	8.0
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	T	7.5	<0.50	<2.0	98.4	<0.50	940	<0.050	107,000	<0.50	3.33	<0.50	19,900	<0.30	<20	210,000	1,190	<2.0	1.64	<2.0	2,000,000	<0.050	<5.0	0.106	<0.50	5.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	130	<0.50	840	0.105	168,000	<0.50	5.06	<0.50	13,800	<0.30	<20	321,000	2,000	<2.0	4.72	<2.0	2,490,000	<0.050	<5.0	0.080	<0.50	7.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-14	T	11.9	<0.50	<2.0	183	<0.50	810	0.053	244,000	<0.50	7.87	1.07	33,700	<0.30	<20	460,000	2,660	<2.0	6.21	<2.0	3,100,000	<0.050	<5.0	0.187	<0.50	24.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	D	<5.0	<0.50	<2.0	181	<0.50	1,160	<0.050	264,000	<0.50	6.98	0.64	10,800	<0.30	<20	563,000	2,990	<2.0	5.00	<2.0	3,250,000	<0.050	<5.0	0.057	<0.50	9.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	2-Dec-14	T	9.6	<0.50	<2.0	196	<0.50	1,170	<0.050	278,000	<0.50	7.46	<0.50	19,200	<0.30	<20	580,000	3,300	<2.0	4.39	<2.0	3,540,000	<0.050	<5.0	0.158	<0.50	6.8
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-15	D	<5.0	<0.50	<2.0	110	<0.50	830	<0.050	147,000	<0.50	2.35	0.59	4,650	<0.30	<20	273,000	1,410	<2.0	1.15	<2.0	2,230,000	<0.050	<5.0	<0.050	<0.50	7.4
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-15	T	65.1	<0.50	<2.0	109	<0.50	800	<0.050	150,000	<0.50	2.45	1.85	21,800	<0.30	<20	269,000	1,300	<2.0	1.37	<2.0	2,300,000	<0.050	<5.0	0.418	0.69	8.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jun-15	D	<5.0	<0.50	<2.0	156	<0.50	1,080	<0.050	182,000	<0.50	2.50	0.63	23,600	<0.30	<20	348,000	1,700	<2.0	1.68	<2.0	3,130,000	<0.050	<5.0	<0.050	<0.50	6.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-Jun-15	T	27.9	<0.50	2.4	144	<0.50	1,070	<0.050	164,000	<0.50	2.82	<0.50	26,100	<0.30	<20	304,000	1,670	<2.0	1.57	<2.0	2,930,000	<0.050	<5.0	0.220	<0.50	4.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	D	<5.0	<0.50	<2.0	233	<0.50	960	0.110	319,000	<0.50	5.53	<0.50	24,700	<0.30	<20	566,000	3,200	<2.0	4.94	<2.0	3,840,000	<0.050	<5.0	<0.050	<0.50	16.2
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	8-Sep-15	T	74.6	0.69	5.3	247	<0.50	1,050	0.133	323,000	<0.50	5.83	0.50	40,800	0.34	<20	568,000	3,270	<2.0	4.77	<2.0	3,810,000	<0.050	<5.0	0.588	0.95	14.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	204	<0.50	1,010	0.119	396,000	<0.50	6.37	<0.50	18,400	<0.30	<20	674,000	3,740	<2.0	2.30	<2.0	4,320,000	<0.050	<5.0	<0.050	<0.50	21.3
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	T	55.9	<0.50	2.4	211	<0.50	1,060	0.162	396,000	<0.50	6.33	0.59	28,800	<0.30	<20	668,000	3,460	<2.0	2.40	<2.0	4,370,000	<0.050	<5.0	0.205	0.70	9.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	119	<0.50	960	0.052	167,000	<0.50	3.08	1.14	6,780	<0.30	<20	299,000	1,520	<2.0	1.15	<2.0	2,760,000	<0.050	<5.0	<0.050	<0.50	6.0
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	1-Mar-16	T	75.0	<0.50	2.5	110	<0.50	950	<0.050	154,000	<0.50	3.21	0.87	24,100	<0.30	<20	283,000	1,640	<2.0	1.26	<2.0	2,690,000	<0.050	<5.0	0.233	0.55	5.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-May-16	D	<5.0	<0.50	<2.0	76.8	<0.50	1,180	0.054	105,000	<0.50	1.15	0.72	62	<0.30	<20	204,000	1,150	<2.0	0.84	<2.0	2,340,000	<0.050	<5.0	<0.050	<0.50	13.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-May-16	T	92.6	<0.50	2.5	91.0	<0.50	1,140	0.189	103,000	<0.50	1.72	0.75	19,300	<0.30	<20	203,000	1,030	<2.0	1.15	<2.0	2,300,000	<0.050	<5.0	0.261	0.88	11.2
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Aug-16	D	<5.0	<0.50	<2.0	114	<0.50	1,410	<0.050	154,000	<0.50	1.87	0.51	8,190	<0.30	<20	311,000	1,470	<2.0	1.14	<2.0	2,850,000	<0.050	<5.0	<0.050	<0.50	7.7
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Aug-16	T	123	<0.50	4.9	164	<0.50	1,540	0.157	171,000	<0.50	3.31	1.68	34,300	0.37	<20	339,000	1,560	<2.0	2.21	<2.0	2,970,000	<0.050	9.0	0.504	1.44	10.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	223	<0.50	1,280	0.091	337,000	<0.50	4.31	<0.50	17,000	<0.30	<20	603,000	3,250	<2.0	1.70	<2.0	3,970,000	<0.050	<5.0	0.050	<0.50	8.5
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	21-Nov-16	T	82.8	<0.50	4.9	241	<0.50	1,230	0.085	326,000	<0.50	4.34	<0.50	36,700	<0.30	<20	587,000	3,190	<2.0	1.45	<2.0	4,180,000	<0.050	<5.0	0.409	1.02	6.0
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	D	6.6	<0.50	<2.0	40.5	<0.50	740	<0.050	111,000	<0.50	1.55	<0.50	3,370	<0.30	<20	211,000	946	<2.0	0.74	3.9	2,260,000	<0.050	<5.0	0.098	<0.50	<3.0
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-17	T	15.9	<0.50	<2.0	95.9	<0.50	840	<0.050	126,000	<0.50	1.92	<0.50	11,900	<0.30	<20	251,000	1,150	<2.0	<0.50	<2.0	2,530,000	<0.050	<5.0	0.101	<0.50	5.1
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	71.9	<0.50	1,220	<0.050	72,600	<0.50	1.26	1.25	3,790	<0.30	<20	147,000	754	<2.0	<0.50	<2.0	2,130,000	<0.050	<5.0	<0.050	<0.50	7.6
P5-7I	Porewater EAZ	P5-7	DS	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	T	49.0	<0.50	3.0	90.6	<0.50	1,170	<0.050	75,300	<0.50	1.43	1.24	26,100	<0.30	<20	150,000	663	<2.0	0.78	<2.0	2,080,000	<0.050	<5.0	0.243	0.96	8.7
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Dec-11	D	<5.0	<0.50	<2.0	66.3	<0.50	210	0.105	37,200	<0.50	11.4	<0.50	218	<0.30	<20	69,300	1,180	<2.0	9.61	<2.0	560,000	<0.050	<5.0	0.585	0.58	42.6
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jan-12	D	6.1	<0.50	<2.0	56.7	<0.50	140	<0.050	25,600	<0.50	9.49	<0.50	<10	<0.30	<20	46,000	876	<2.0	5.18	<2.0	342,000	<0.050	<5.0	0.588	<0.50	28.6
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Feb-12	D	<15	<0.050	0.51	50.0	<0.025	144	<0.025	27,500	<2.5	6.32	<2.5	95	<0.25	3.9	49,800	671	0.60	3.6	<1.0	374,000	0.025	<1.0	0.641	<0.25	42
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Mar-12	D	7.0	0.055	0.30	37.3	<0.010	188	<0.010	32,100	<1.0	5.33	<1.0	433	<0.10	6.48	59,200	729	0.54	2.33	<0.40	455,000	0.0134	<0.40	0.694	<0.10	18.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Apr-12	D	53.9	0.067	0.434	56.1	0.0101	223	0.0269	45,800	<0.50	6.81	0.68	1,870	0.076	7.36	78,900	914	0.719	2.99	0.20	551,000	0.0108	4.21	0.584	0.457	277
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-May-12	D	<5.0	<0.50	<2.0	66.3	<0.50	430	<0.050	63,500	<0.50	3.35	<0.50	1,410	<0.30	<20	123,000	568	<2.0	2.36	<2.0	970,000	<0.050	<5.0	0.889	<0.50	88.7
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	4-Jun-12	D	6.1	<0.50	<2.0	162	<0.50	230	0.086	91,000	<0.50	11.7	0.70	1,650	<0.30	<20	181,000	1,460	<2.0	3.89	<2.0	716,000	<0.050	<5.0	0.321	<0.50	28.7
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	5-Jul-12	D	<5.0	<0.50	<2.0	356	<0.50	310	0.118	173,000	<0.50	15.4	0.57	597	<0.30	<20	376,000	1,930	<2.0	4.73	<2.0	980,000	<0.050	<5.0	0.298	<0.50	18.4
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Aug-12	D	7.8 J	<0.50	<2.0	431	<0.50	630	0.306	227,000	<0.50	16.6	0.73 J	437	<0.30	25	529,000	2,040	<2.0	6.67	<2.0	1,990,000	<0.050	<5.0	0.379	<0.50	30.5
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-12	D	52.7	<0.50	<2.0	511	<0.50	250	0.71	305,000	<0.50	33.5	<0.50	3,530	<0.30	<20	689,000	3,590	<2.0	8.68	<2.0	1,240,000	0.320	<5.0	0.266	<0.50	40.6
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Oct-12	D	55.3	<0.50	<2.0	341	<0.50	260	1.48	403,000	<0.50	52.0	2.24	166	<0.30	<20	925,000	4,750	<2.0	11.4	<2.0	1,720,000	0.053	<5.0	0.368	<0.50	65.3
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Nov-12	D	60.7	<0.50	<2.0	295	<0.50	270	1.34	519,000	<0.50	41.1	1.34	2,090	<0.30	<20	1,170,000	5,760	<2.0	12.6	<2.0	2,030,000	<0.050	<5.0	0.458	<0.50	73.9
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Dec-12	D	28.3	<0.50	<2.0	244	<0.50	420	1.15	585,000	<0.50	37.9	2.99	1,150	<0.30	<20	1,160,000	6,310	<2.0	11.8	<2.0	2,540,000	<0.050	<5.0	0.366	<0.50	100
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Jan-13	D	22.3	<0.50	<2.0	180	<0.50	330	0.980	527,000	<0.50	31.3	0.72	946	<0.30	<20	1,110,000	5,130	<2.0	9.38	<2.0	2,520,000	<0.050	<5.0	0.237	<0.50	71.9
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-13	D	17.5	<0.50	<2.0	101	<0.50	210	0.771	345,000	<0.50	20.4	0.90	333	<0.30	<20	676,000	3,680	<2.0	7.63	<2.0	1,940,000	<0.050	<5.0	0.159	<0.50	80.1
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Jun-13	D	11.4	<0.50	<2.0	74.5	<0.50	460	0.226	152,000	<0.50	10.4	<0.50	3,150	<0.30	<20	309,000	1,720	<2.0	3.65	<2.0	1,580,000	<0.050	<5.0	0.201	<0.50	16.7
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	16-Sep-13	D	8.3	<0.50	<2.0	101	<0.50	650	0.166	231,000	<0.50	7.69	0.92	236	<0.30	<20	457,000	2,270	<2.0	4.39	<2.0	2,490,000	<0.050	<5.0	0.218	<0.50	14.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	11-Dec-13	D	16.8	<0.50	<2.0	106	<0.50	490	1.43	479,000	<0.50	24.7	0.79	194	<0.30	<20	844,000	4,640	2.8	6.84	<2.0	3,930,000	<0.050	<5.0	0.098	<0.50	26.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Mar-14	D	39.4	<0.50	<2.0	74.8	<0.50	500	0.622	329,000	<0.50	15.2	0.86	1,740	<0.30	<20	572,000	3,470	<2.0	7.17	<2.0	2,960,000	<0.050	<5.0	0.078	<0.50	27.2
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	12-Jun-14	D	<5.0	<0.50	<2.0	56.4	<0.50	760	0.062	148,000	<0.50	5.59	0.80	783	<0.30	<20	246,000	1,650	<2.0	2.53	<2.0	2,270,000	<0.050	<5.0	0.071	<0.50	9.6
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	10-Sep-14	D	<5.0	<0.50	<2.0	130	<0.50	920	0.120	308,000	<0.50	14.8	0.93	9,370	<0.30	<20	529,000	4,190	<2.0	4.45	<2.0	3,500,000	<0.050	<5.0	0.115	<0.50	16.5
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	2-Dec-14	D	15.7	<0.50	<2.0	111	<0.50	1,160	0.497	373,000	<0.50	15.0	0.65	6,010	<0.30	<20	753,000	4,480	<2.0	5.41	<2.0	4,190,000	<0.050	<5.0	0.236	<0.50	21.9
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	9-Mar-15	D	5.4	<0.50	<2.0	70.3	<0.50	960	<0.050	158,000	<0.50	4.25	<0.50	9,620	<0.30	<20	269,000	1,990	<2.0	1.63	<2.0	2,540,000	<0.050	<5.0	0.116	<0.50	<3.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	66.6	<0.50	990	<0.050	130,000	<0.50	1.75	<0.50	3,090	<0.30	<20	219,000	1,120	<2.0	1.15	<2.0	2,500,000	<0.050	<5.0	0.081	<0.50	4.2
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	8-Sep-15	D	6.0	<0.50	<2.0	186	<0.50	940	<0.050	406,000	<0.50	6.72	<0.50	12,700	<0.30	<20	684,000	4,990	<2.0	2.57	<2.0	4,180,000	<0.050	<5.0	0.105	<0.50	6.3
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	145	<0.50	970	<0.050	466,000	<0.50	8.71	0.53	6,610	<0.30	<20	767,000	4,120	<2.0	2.91	<2.0	4,660,000	<0.050	<5.0	0.052	<0.50	15.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	1-Mar-16	D	<5.0	<0.50	<2.0	70.1	<0.50	930	<0.050	193,000	<0.50	3.42	0.63	4,080	<0.30	<20	324,000	1,660	<2.0	1.70	<2.0	2,820,000	<0.050	<5.0	0.067	<0.50	6.3
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-May-16	D	<5.0	<0.50	<2.0	49.1	<0.50	1,180	<0.050	105,000	<0.50	1.64	<0.50	3,460	<0.30	<20	195,000	1,210	<2.0	0.88	<2.0	2,280,000	<0.050	<5.0	0.079	<0.50	7.5
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	17-Aug-16	D	<5.0	<0.50	<2.0	117	<0.50	1,760	<0.050	245,000	<0.50	2.39	<0.50	1,470	<0.30	<20	493,000	2,070	<2.0	1.12	<2.0	3,800,000	<0.050	<5.0	0.070	<0.50	3.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	127	<0.50	1,200	<0.050	393,000	<0.50	4.68	<0.50	1,190	<0.30	<20	658,000	3,830	<2.0	1.56	<2.0	4,410,000	<0.050	<5.0	0.065	<0.50	9.7
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-17	D	<5.0	<0.50	<2.0	38.7	<0.50	690	<0.050	107,000	<0.50	1.95	<0.50	5,080	<0.30	<20	201,000	976	<2.0	0.8	<2.0	2,150,000	<0.050	<5.0	0.107	<0.50	<3.0
P5-7D	Porewater	P5-7	DS	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	32.4	<0.50	990	<0.050	55,500	<0.50	0.452	<0.50	380	<0.30	<20	105,000	450	<2.0	<0.50	<2.0	1,660,000	<0.050	<5.0	0.089	<0.50	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	D	20.5	<0.50	6.9	129	<0.50	530	<0.050	162,000	<0.50	6.40	<0.50	17,800	<0.30	22	137,000	5,240	<2.0	5.71	<2.0	1,210,000	<0.050	<5.0	1.92	2.77	6.5
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	---	Well Not Sampled																								
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	17.2	0.179	3.74	23.7	0.0143	215	<0.0050	75,700	<0.50	0.133	<0.20	5,890	<0.050	9.51	53,000	2,750	0.064	1.84	0.44	336,000	<0.0020	0.87	0.0329	2.52	1.7
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	---	Well Not Sampled																								
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	16.1	0.092	1.52	5.77	0.0109	76.5	<0.0050	53,200	<0.50	0.064	0.27	11,100	<0.050	6.88	19,200	3,470	0.052	0.38	0.24	59,300	<0.0020	0.84	0.0092	2.21	2.6
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	D	16.1	0.130	3.46	128	0.019	424	0.013	247,000	<1.0	<0.10	<0.40	14,100	<0.10	18.9	164,000	6,210	0.12	0.55	0.40	1,130,000	<0.0040	1.25	0.0417	3.61	<2.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	T	21.4	0.174	4.65	114	0.020	397	0.018	237,000	<1.0	0.22	<1.0	16,600	0.23	18.6	149,000	5,700	0.36	0.90	<0.40	966,000	<0.0040	1.63	0.0508	3.65	<6.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	D	23.2	<0.50	3.7	256	<0.50	1,810	0.059	274,000	<0.50	0.245	<0.50	1,210	<0.30	25	371,000	2,750	<2.0	1.10	<2.0	3,870,000	<0.050	<5.0	0.252	6.32	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	T	63.3	<0.50	4.7	228	<0.50	1,890	<0.050	250,000	0.80	0.549	1.57	2,460	<0.30	24	322,000	2,770	<2.0	1.60 J+	<2.0	3,510,000	<0.050	5.5	0.251	8.01	<4.0 U
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	D	16.6	0.056	1.04	43.2	0.012	279	0.040	136,000	<1.0	<0.10	<0.40	1,720	<0.10	14.0	105,000	4,450	<0.10	0.50	0.92	774,000	<0.0040	1.14	0.0337	3.84	2.2
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	T	22.1	<0.090 U	1.15	43.3	0.013	294	0.027	129,000	<1.0	<0.10	<1.0	1,880	0.13	14.3	101,000	4,300	0.19	0.64	<0.40	746,000	<0.0040	1.52	0.0343	4.10	<6.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	D	16.9	0.082	0.73	26.3	<0.010	138	0.012	53,200	<1.0	<0.10	<0.40	3,290	<0.10	6.60	48,600	2,000	<0.10	<0.40	<0.40	294,000	<0.0040	0.83	0.0246	2.61	2.2
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	T	22.5	0.139	0.95	58.0	0.011	207	0.030	90,700	<1.0	0.12	<1.0	6,060	<0.10	8.82	82,400	3,200	0.21	<0.40	<0.40	525,000	<0.0040	1.47	0.0554	2.67	<6.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	D	12.5	0.089	1.17	69.6	<0.010	245	<0.010	133,000	<1.0	<0.10	<0.40	4,570	<0.10	13.0	100,000	4,400	<0.10	<0.40	<0.40	609,000	<0.0040	0.86	0.0145	2.71	2.1

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	T	21.1	0.167	1.72	90.6	0.013	306	0.185	142,000	<1.0	0.40	<1.0	6,890	0.21	14.6	109,000	4,580	0.37	0.76	<0.40	704,000	<0.0040	1.56	0.0214	2.95	<6.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	D	11.7 J	<0.50	<2.0	737	<0.50	2,000	<0.050	562,000	<0.50	0.100	<0.50	714	<0.30	40.0	859,000	4,880	<2.0	<0.50	<2.0	7,180,000	<0.050	<5.0	0.149	4.22	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	T	183 J	<0.50 UJ	2.3 J	720	<0.50	1,910	0.489 J	521,000	0.83 J	0.511 J	8.45 J	4,150 J	0.66 J	38	840,000	4,420	<2.0 UJ	1.22 J	<2.0	6,390,000	<0.050	14.7 J	0.234 J	5.36 J	16.3 J
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	13.6	0.049	0.647	20.4	0.0084	222	0.0092	57,600	<0.50	<0.050	0.20	252	<0.050	8.59	49,600	1,810	<0.050	0.87	0.61	356,000	<0.0020	1.06	0.0106	2.83	2.8
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	32.8	0.143	0.689	29.2	0.0095	257	0.107	64,800	<0.50	0.063	0.79	561	0.105	8.72	58,300	1,800	0.193	0.61	0.21	426,000	<0.0020	2.40	0.0206	3.18	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	D	9.8	0.086	0.742	60.2	0.0144	161	0.195	165,000	<0.50	<0.050	<0.20	9,340	<0.050	7.92	122,000	6,400	0.105	0.26	0.87	476,000	<0.0020	0.61	0.0171	2.47	2.50
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-15	T	19.3	0.140	0.816	69.6	0.0154	166	0.585	165,000	<0.50	<0.050	<0.50	10,000	0.083	8.19	119,000	6,050	0.245	0.27	0.25	470,000	<0.0050	2.17	0.0203	2.63	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	D	6.7	<0.50	<2.0	700	<0.50	1,610	<0.050	672,000	<0.50	<0.050	<0.50	2,090	<0.30	30.0	779,000	7,550	<2.0	<0.50	<2.0	5,490,000	<0.050	<5.0	0.093	2.98	<3.0
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	D	7.5	<0.50	<2.0	707	<0.50	1,620	<0.050	657,000	<0.50	0.061	<0.50	2,080	<0.30	31	773,000	7,570	<2.0	<0.50	<2.0	5,450,000	<0.050	<5.0	0.094	3.07	<3.0
QA/QC RPD										Duplicates	D	11%	---	---	1%	---	1%	---	2%	---	---	---	0%	---	3%	1%	0%	---	---	---	1%	---	---	1%	3%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	T	9.9	<0.50	<2.0	725	<0.50	1,670	0.201	682,000	<0.50	0.063	<0.50	2,350	<0.30	32	785,000	8,460	<2.0	<0.50	<2.0	5,550,000	<0.050	<5.0	0.101	3.50	<3.0
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	T	9.7	<0.50	<2.0	721	<0.50	1,640	0.195	695,000	<0.50	0.062	<0.50	2,370	<0.30	30.0	794,000	7,950	<2.0	<0.50	<2.0	5,640,000	<0.050	<5.0	0.096	3.27	<3.0
QA/QC RPD										Duplicates	T	---	---	---	1%	---	2%	3%	2%	---	---	---	1%	---	6%	1%	6%	---	---	---	2%	---	---	5%	7%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	12.4	<0.50	<2.0	370	<0.50	2,350	<0.050	424,000	<0.50	0.162	<0.50	196	<0.30	39	696,000	2,840	<2.0	0.94	<2.0	5,400,000	<0.050	<5.0	<0.050	3.36	<3.0
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	12.0	<0.50	<2.0	379	<0.50	2,290	<0.050	432,000	<0.50	0.129	<0.50	192	<0.30	37	710,000	2,910	<2.0	0.67	<2.0	5,580,000	<0.050	<5.0	<0.050	3.63	<3.0
QA/QC RPD										Duplicates	D	3%	---	---	2%	---	3%	---	2%	---	---	---	2%	---	5%	2%	2%	---	---	---	3%	---	---	---	8%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	19.4	<0.50	<2.0	388	<0.50	2,320	<0.050	393,000	0.59	0.133	0.94	436	<0.30	39	643,000	2,840	<2.0	1.69	<2.0	4,960,000	<0.050	<5.0	<0.050	3.50	<3.0
DUP-8 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	17.5	<0.50	<2.0	362	<0.50	2,290	<0.050	385,000	0.64	0.160	1.00	415	<0.30	36	619,000	2,740	<2.0	1.85	<2.0	4,880,000	<0.050	<5.0	<0.050	3.65	<3.0
QA/QC RPD										Duplicates	T	---	---	---	7%	---	1%	---	2%	---	---	---	5%	---	8%	4%	4%	---	9%	---	2%	---	---	---	4%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	10.3	<0.50	<2.0	84.0	<0.50	770	<0.050	204,000	<0.50	0.071	<0.50	133	<0.30	<20	212,000	5,050	<2.0	<0.50	<2.0	1,760,000	<0.050	<5.0	<0.050	3.04	4.30
DUP-7 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	10.4	<0.50	<2.0	81.1	<0.50	610	<0.050	222,000	<0.50	0.059	<0.50	90.0	<0.30	<20	223,000	5,200	<2.0	<0.50	<2.0	1,750,000	<0.050	<5.0	<0.050	3.25	<3.0
QA/QC RPD										Duplicates	D	1%	---	---	4%	---	23%	---	8%	---	---	---	39%	---	---	5%	3%	---	---	---	1%	---	---	---	7%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	11.0	<0.50	<2.0	211	<0.50	1,550	0.059	369,000	<0.50	0.109	<0.50	291	<0.30	<20	477,000	3,960	<2.0	<0.50	<2.0	4,130,000	<0.050	<5.0	<0.050	3.00	3.90
DUP-7 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	12.5	<0.50	<2.0	242	<0.50	1,410	0.085	381,000	<0.50	0.099	<0.50	215	<0.30	<20	480,000	4,600	<2.0	<0.50	<2.0	4,020,000	<0.050	<5.0	<0.050	2.98	<3.0
QA/QC RPD										Duplicates	T	---	---	---	14%	---	9%	36%	3%	---	---	---	30%	---	---	1%	15%	---	---	---	3%	---	---	---	1%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	17.5	0.031	0.332	13.8	0.0091	130	0.0254	45,700	<0.50	<0.050	0.49	1,240	<0.050	8.80	43,700	1,690	<0.050	0.21	0.26	230,000	<0.0020	0.91	0.0108	2.94	3.90
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	32.9	0.061	0.343	12.5	0.0094	126	0.246	43,700	<0.50	<0.050	0.61	1,440	0.406	7.68	41,100	1,450	0.123	<0.20	<0.20	213,000	<0.0050	1.66	0.0159	2.76	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	D	12.0	<0.50	<2.0	335	<0.50	740	<0.050	541,000	<0.50	0.067	0.94	26,600	<0.30	33	481,000	16,200	<2.0	0.70	<2.0	3,020,000	<0.050	<5.0	0.059	2.70	11.8
DUP-5 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	D	11.5	<0.50	<2.0	326	<0.50	710	<0.050	535,000	<0.50	<0.050	<0.50	26,300	<0.30	32	476,000	16,000	<2.0	0.55	<2.0	3,000,000	<0.050	<5.0	0.060	2.58	3.4
QA/QC RPD										Duplicates	D	4%	---	---	3%	---	4%	---	1%	---	---	---	1%	---	3%	1%	1%	---	---	---	1%	---	---	2%	5%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	T	25.3	<0.50	<2.0	319	<0.50	840	0.409	527,000	<0.50	0.103	1.04	27,200	<0.30	34	462,000	15,400	<2.0	0.81	<2.0	2,800,000	<0.050	<5.0	0.057	2.47	7.4
DUP-5 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	T	22.9	<0.50	<2.0	325	<0.50	840	0.389	539,000	<0.50	0.092	0.86	24,900	<0.30	35	469,000	15,400	<2.0	0.75	<2.0	2,920,000	<0.050	<5.0	0.067	2.69	5.3
QA/QC RPD										Duplicates	T	---	---	---	2%	---	0%	5%	2%	---	---	---	9%	---	3%	2%	0%	---	---	---	4%	---	---	16%	9%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	D	8.3	<0.50	<2.0	428	<0.50	1,940	<0.050	495,000	<0.50	0.060	<0.50	45	<0.30	36	650,000	3,490	<2.0	<0.50	<2.0	4,820,000	<0.050	<5.0	0.161	3.13	<3.0
DUP-1 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	D	9.1	<0.50	<2.0	412	<0.50	1,950	<0.050	486,000	<0.50	0.088	<0.50	44	<0.30	35	646,000	3,570	<2.0	<0.50	<2.0	4,870,000	<0.050	<5.0	0.164	3.18	<3.0
QA/QC RPD										Duplicates	D	9%	---	---	4%	---	1%	---	2%	---	---	---	---	---	3%	1%	2%	---	---	---	1%	---	---	2%	2%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	T	22.3	<0.50	<2.0	457	<0.50	2,090	0.083	498,000	<0.50	0.083	<0.50	1,860	<0.30	34	664,000	3,490	<2.0	<0.50	<2.0	4,880,000	<0.050	<5.0	0.177	3.46	3.1
DUP-1 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-Aug-16	T	25.3	<0.50	<2.0	450	<0.50	2,150	<0.050	509,000	<0.50	0.099	<0.50	373	<0.30	34	667,000	3,560	<2.0	<0.50	<2.0	5,010,000	<0.050	<5.0	0.174	3.54	3.1
QA/QC RPD										Duplicates	T	---	---	---	2%	---	3%	---	2%	---	---	---	133%	---	0%	0%	2%	---	---	---	3%	---	---	2%	2%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	D	13.5	<0.50	<2.0	114	<0.50	1,010	<0.050	192,000	<0.50	<0.050	<0.50	170	<0.30	<20	282,000	1,140	<2.0	<0.50	<2.0	2,230,000	<0.050	<5.0	<0.050	2.69	<3.0
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	T	24.8	<0.50	<2.0	116	<0.50	1,050	0.340	184,000	<0.50	0.068	<0.50	367	<0.30	22	269,000	1,080	<2.0	<0.50	<2.0	2,090,000	<0.050	<5.0	0.054	3.06	3.2
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	13.9	0.066	0.27	59.4	0.013	371	0.035	89,200	<1.0	<0.10	<0.40	1,880	<0.10	12.2	127,000	1,680	0.1	<0.40	<0.40	790,000	<0.0040	0.58	0.0144	2.14	2.6
DUP-4 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	15.0	0.059	0.21	49.6	<0.010	299	0.033	83,600	<1.0	<0.10	<0.40	1,820	<0.10	9.61	117,000	1,560	<0.10	<0.40	<0.40	809,000	<0.0040	0.60	0.0121	2.16	3.0
QA/QC RPD										Duplicates	D	8%	11%	---	18%	---	21%	6%	6%	---	---	---	3%	---	24%	8%	7%	---	---	---	2%	---	---	17%	1%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	38.6	0.165	0.248	22.4	0.0097	201	0.520	41,900	<0.50	0.054	<0.50	1,490	0.145	7.93	52,200	1,060	0.129	0.42	<0.20	347,000	<0.0050	2.5	0.016	3.05	9.8
DUP-4 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	33.5	0.161	0.256	21.1	0.0101	200	0.527	42,500	<0.50	<0.050	<0.50	1,460	0.140	7.78	55,300	1,010	0.114	0.37	<0.20	347,000	<0.0050	1.94	0.0158	2.85	9.5
QA/QC RPD										Duplicates	T	14%	2%	---	6%	---	0%	1%	1%	---	---	---	2%	---	2%	6%	5%	---	---	---	0%	---	25%	1%	7%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	8.5	<0.50	<2.0	275	<0.50	540	<0.050	457,000	<0.50	<0.050	<0.50	21,400	<0.30	25	373,000	11,200	<2.0	<0.50	<2.0	2,600,000	<0.050	<5.0	<0.050	1.54	<3.0
DUP-6 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	8.2	<0.50	<2.0	288	<0.50	550	<0.050	465,000	<0.50	<0.050	<0.50	21,400	<0.30	26	378,000	11,400	<2.0	<0.50	<2.0	2,610,000	<0.050	<5.0	<0.050	1.47	<3.0
QA/QC RPD										Duplicates	D	4%	---	---	5%	---	2%	---	2%	---	---	---	0%	---	4%	1%	2%	---	---	---	0%	---	---	---	5%	---
P5.25-3	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	11.4	<0.50	<2.0	325	<0.50	570	0.054	531,000	<0.50	0.076	<0.50	23,900	<0.30	28	447,000	12,400	<2.0	<0.50	<2.0	2,750,000	<0.050	<5.0	<0.050	1.46	<3.0
DUP-6 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	10.5	<0.50	<2.0	327	<0.50	640	0.051	547,000	<0.50	0.064	<0.50	23,900	<0.30	29	457,000	12,400	<2.0	<0.50	<2.0	2,850,000	<0.050	<5.0	<0.050	1.49	<3.0
QA/QC RPD										Duplicates	T	---	---	---	1%	---	12%	6%	3%	---	---	---	0%	---	4%	2%	0%	---	---	---	4%	---	---	---	2%	---
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	D	<5.0	0.84	3.4	138	<0.50	2,060	0.075	265,000	<0.50	14.1	0.55	294	<0.30	<20	484,000	10,800	9.2	14.5	<2.0	4,540,000	<0.050	<5.0	8.17	<0.50	8.4
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12	D	<5.0	<0.50	<4.0	92.5	<0.50	3,430	<0.050	320,000	<0.50	7.57	0.57	121	<0.30	33	863,000	3,770	7.1	7.44	<2.0	6,930,000	0.114	<5.0	5.2	<0.50	5.1
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	D	<5.0	<0.50	4.1	163	<0.50	650	0.256	98,500	<0.50	4.50	<0.50	161	<0.30	<20	109,000	2,150	<2.0	5.38	<2.0	982,000	<0.050	<5.0	1.23	<0.50	7.9
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	---													Well Not Sampled												
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	D	<5.0	<0.50	2.2	349	<0.50	630	0.087	164,000	<0.50	10.3	0.50	242	<0.30	<20	279,000	4,330	<2.0	8.73	<2.0	1,700,000	<0.050	<5.0	2.05	<0.50	8.3
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	D	<5.0	<0.50	3.3	195	<0.50	1,650	0.122	182,000	<0.50	12.5	<0.50	1,230	<0.30	40	372,000	2,630	<2.0	12.1	<2.0	3,130,000	0.056	<5.0	1.41	<0.50	11.1
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	T	10.6	<0.50	3.6	189	<0.50	1,600	0.248	182,000	<0.50	11.8	<0.50	1,290	<0.30	39	372,000	2,420	<2.0	11.1	<2.0	3,140,000	0.057	<5.0	1.34	<0.50	9.1
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	D	<5.0	<0.50	<2.0	92.9	<0.50	3,390	<0.050	301,000	<0.50	4.05	0.62	7,000	<0.30	72	872,000	1,880	<2.0	9.22	<2.0	7,600,000	<0.050	<5.0	0.856	<0.50	6.5
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	T	186	<0.50	<2.0	135	<0.50	3,620	0.072	321,000	<0.50	4.62	2.14	11,200	0.40	79	918,000	2,110	<2.0	10.5	<2.0	8,060,000	<0.050	8.5	1.12	0.59	<10 U
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	D	<5.0	<0.50	<2.0	246	<0.50	1,490	<0.050	201,000	<0.50	2.35	<0.50	3,780	<0.30	39	451,000	1,490	5.2	3.69	<2.0	3,380,000	<0.050	<5.0	2.29	<0.50	5.5
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	T	75.2	<0.50	<2.0	231	<0.50	1,270	0.170	172,000	<0.50	2.10	<0.80	4,710	1.01	30	352,000	1,760	8.1	3.21	<2.0	2,550,000	0.273	6.4	2.35	0.57	5.4
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	D	<5.0	<0.50	<2.0	255	<0.50	520	<0.050	66,400	<0.50	1.30	<0.50	3,700	<0.30	<20	80,500	916	<2.0	1.60	<2.0	764,000	<0.050	<5.0	0.349	<0.50	4.2
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Mar-14	T	120	<0.50	2.5	268	<0.50	530	0.062	63,300	<0.50	1.39	1.10	4,100	0.37	<20	74,300	874	<2.0	1.98	<2.0	742,000	<0.050	5.1	0.384	0.52	4.9
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	D	<5.0	<0.50	<2.0	344	<0.50	1,190	<0.050	270,000	<0.50	1.94	<0.50	6,960	<0.30	66	370,000	3,640	3.0	3.10	<2.0	2,940,000	<0.050	<5.0	3.02	<0.50	5.9
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	T	15.6	<0.50	2.6	237	<0.50	880	<0.050	164,000	0.55	1.17	1.58	4,260	<0.30	43	190,000	2,460	2.6	2.07	<2.0	1,770,000	<0.050	<5.0	2.14	<0.50	3.1
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	D	<5.0	<0.50	<2.0	126	<0.50	3,050	0.274	315,000	<0.50	0.402	<0.50	8,100	<0.30	97	919,000	1,600	<2.0	3.33	<2.0	7,920,000	<0.050	<5.0	0.720	<0.50	4.6
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Sep-14	T	823	0.70	3.0	559	<0.50	2,790	1.47	300,000	1.37	1.77	6.79	10,700	2.70	91	874,000	1,730	3.1	7.12	<2.0	7,500,000	0.075	41.0	1.01	2.94	27.4
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	4-Dec-14	D	<5.0	<0.50	<2.0	333	<0.50	480	<0.050	63,100	<0.50	0.438	<0.50	3,130	<0.30	<20	146,000	797	<2.0	1.51	<2.0	1,040,000	<0.050	<5.0	0.515	<0.50	4.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	4-Dec-14	T	6.4	<0.50	<2.0	355	<0.50	490	<0.050	65,800	<0.50	0.446	<0.50	3,480	<0.30	<20	150,000	804	<2.0	1.38	<2.0	1,060,000	<0.050	<5.0	0.555	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	D	<5.0	<0.50	<2.0	203	<0.50	1,350	<0.050	297,000	<0.50	0.374	<0.50	5,210	<0.30	33	510,000	1,420	<2.0	1.02	<2.0	3,640,000	<0.050	<5.0	1.77	<0.50	3.10
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	T	17.4	<0.50	2.3	226	<0.50	1,380	<0.050	310,000	<0.50	0.439	0.63	5,420	<0.30	36	536,000	1,290	<2.0	1.05	<2.0	3,930,000	<0.050	<5.0	1.83	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jun-15	D	<5.0	<0.50	<2.0	137	<0.50	2,810	<0.050	313,000	<0.50	0.257	<0.50	9,540	<0.30	73	865,000	964	<2.0	1.16	<2.0	7,340,000	<0.050	<5.0	0.452	<0.50	3.5
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	18-Jun-15	T	13.7	<0.50	<2.0	189	<0.50	2,830	<0.050	328,000	<0.50	0.290	0.60	9,990	<0.30	72	883,000	1,080	<2.0	1.16	<2.0	7,700,000	<0.050	<5.0	0.446	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	D	<5.0	<0.50	<2.0	105	<0.50	3,060	<0.050	285,000	<0.50	0.077	<0.50	6,320	<0.30	74	812,000	1,590	<2.0	2.50	<2.0	6,450,000	<0.050	<5.0	0.609	<0.50	35.70
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	T	8.1	<0.50	<2.0	131	<0.50	2,910	<0.050	285,000	<0.50	0.060	<0.50	7,240	<0.30	75	814,000	1,660	<2.0	1.95	<2.0	6,870,000	<0.050	<5.0	0.560	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	D	<2.0	0.056	0.62	131	<0.010	987	<0.010	20,500	<1.0	<0.10	<0.40	182	<0.10	11.1	40,400	113	0.26	<0.40	<0.40	780,000	<0.0040	<0.40	0.165	0.35	3.80
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	T	105	0.114	0.84	149	<0.010	1,020	0.032	23,200	2.3	<0.10	<1.0	679	0.20	12.2	44,000	128	0.31	<0.40	<0.40	807,000	<0.010	5.70	0.200	0.74	<6.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	D	<5.0	<0.50	<2.0	521	<0.50	810	<0.050	170,000	<0.50	<0.050	<0.50	1,630	<0.30	<20	287,000	559	<2.0	<0.50	<2.0	2,070,000	<0.050	<5.0	0.610	<0.50	6.20
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	T	6.4	<0.50	<2.0	521	<0.50	880	<0.050	168,000	<0.50	0.055	<0.50	2,000	<0.30	<20	280,000	648	<2.0	<0.50	<2.0	2,050,000	<0.050	<5.0	0.661	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	D	<5.0	<0.50	<2.0	201	<0.50	2,540	<0.050	293,000	<0.50	0.062	0.59	3,810	<0.30	64	742,000	678	<2.0	0.52	<2.0	6,100,000	<0.050	<5.0	0.507	<0.50	7.7
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	T	29.5	<0.50	<2.0	283	<0.50	2,580	0.116	259,000	<0.50	0.100	0.79	4,370	<0.30	73	709,000	590	<2.0	<0.50	<2.0	5,880,000	<0.050	<5.0	0.574	<0.50	6.3
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Aug-16	D	<5.0	<0.50	<2.0	130	<0.50	3,040	0.051	307,000	<0.50	<0.050	<0.50	4,170	<0.30	111	889,000	648	<2.0	0.88	<2.0	7,750,000	<0.050	<5.0	0.270	<0.50	3.6
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	22-Aug-16	T	189	<0.50	<2.0	361	<0.50	2,960	0.186	298,000	<0.50	0.244	1.22	5,530	0.46	105	869,000	650	<2.0	1.68	<2.0	7,440,000	<0.050	<5.0	0.416	1.01	8.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	D	<5.0	<0.50	<2.0	672	<0.50	920	<0.050	67,900	<0.50	<0.050	<0.50	125	<0.30	<20	225,000	171	<2.0	<0.50	<2.0	2,170,000	<0.050	<5.0	0.098	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	T	56.3	<0.50	<2.0	1,240	<0.50	760	0.167	57,900	<0.50	0.065	0.98	999	0.37	<20	187,000	150	<2.0	<0.50	<2.0	1,980,000	<0.050	<5.0	0.139	0.63	7.9
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	D	<5.0	<0.50	<2.0	170	<0.50	660	<0.050	81,500	<0.50	<0.050	<0.50	209	<0.30	<20	133,000	201	<2.0	<0.50	<2.0	1,250,000	<0.050	<5.0	0.099	<0.50	3.3
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	T	18.1	<0.50	<2.0	204	<0.50	770	<0.050	73,100	1.41	<0.050	<0.50	659	<0.30	<20	121,000	161	<2.0	0.57	<2.0	1,260,000	<0.050	<5.0	0.117	<0.50	4.3
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	D	<5.0	<0.50	<2.0	429	<0.50	1,020	<0.050	181,000	<0.50	<0.050	<0.50	1,160	<0.30	39	353,000	392	<2.0	<0.50	3.5	2,440,000	<0.050	<5.0	0.187	<0.50	<3.0
P5.25-5	Porewater EAZ	P5.25-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	T	10.5	<0.50	<2.0	401	<0.50	1,070	<0.050	187,000	<0.50	<0.050	<0.50	1,250	<0.30	41	388,000	380	<2.0	<0.50	<2.0	2,490,000	<0.050	<5.0	0.168	<0.50	<3.0
P5.5-3	Porewater EAZ	P5.5-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-12	D	<5.0	<0.50	<2.0	143	<0.50	140	<0.050	374,000	<0.50	1.70	<0.50	40,300	<0.30	40	127,000	14,200	<2.0	1.46	<2.0	693,000	<0.050	<5.0	0.620	<0.50	12.1
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Apr-12	D	34.1	0.217	3.96	18.0	0.0054	62.1	0.0270	73,200	<0.50	1.28	<0.50	10,900	0.121	5.09	24,000	4,780	1.13	1.62	0.42	75,600	<0.0020	1.88	0.389	1.67	6.9
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-May-12	D	10.8	0.145	1.59	22.9	0.0082	44.6	0.0070	79,200	<0.50	0.341	<0.50	26,800	<0.050	3.16	25,700	7,770	0.091	0.52	0.33	80,400	<0.0020	0.43	0.0716	1.82	6.6
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	D	9.6	0.222	2.03	90.5	<0.010	139	0.036	175,000	<1.0	1.80	<0.40	46,400	<0.10	6.30	75,000	13,300	0.28	1.57	<0.40	391,000	<0.0040	0.50	0.0985	1.87	17.7
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jul-12	D	12.1	0.203	2.44	117	0.011	229	0.032	174,000	<1.0	0.17	0.54	34,500	0.12	8.25	98,900	11,200	0.11	1.1	<0.40	648,000	<0.0040	0.80	0.0444	2.46	5.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	D	14.5	<0.50	5.4	381	<0.50	680	0.053	334,000	<0.50	0.207	1.05	34,600	<0.30	37	323,000	10,600	<2.0	5.80	<2.0	2,340,000	<0.050	<5.0	1.43	3.76	6.6
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	---													Well Not Sampled - Insufficient Water for Analysis												
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	---													Well Not Sampled - Insufficient Water for Analysis												
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	D	13.8	0.172	2.55	13.6	0.0089	65.6	0.0090	63,100	<0.50	0.085	<0.20	13,800	<0.050	6.95	23,400	4,850	0.145	0.40	0.31	64,200	<0.0020	0.92	0.0550	3.41	1.2
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	13.1	0.222	2.32	14.6	0.0109	109	<0.0050	50,200	<0.50	0.098	<0.20	8,590	<0.050	4.17	24,500	3,360	0.064	1.52	0.46	126,000	<0.0020	0.75	0.0128	2.49	3.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	D	14.5	0.216	1.81	13.4	0.0097	129	0.0087	53,400	<0.50	0.080	<0.20	8,740	<0.050	4.47	22,700	3,410	0.058	0.43	0.43	103,000	<0.0020	0.85	0.0097	2.62	2.3
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	---													Well Not Sampled												
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	12.3	0.115	1.11	8.63	0.0077	41.5	0.0689	54,600	<0.50	0.153	0.33	13,900	<0.050	3.28	16,800	4,890	0.062	1.19	0.26	29,500	<0.0020	0.58	0.0051	1.91	6.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	D	10.7	0.151	2.16	86.1	<0.010	198	<0.010	152,000	<1.0	<0.10	<0.40	25,500	<0.10	6.53	78,700	7,600	<0.10	1.42	<0.40	569,000	<0.0040	0.94	0.0093	3.37	3.4
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Jun-13	T	173	0.232	3.23	31.5	0.012	137	0.025	56,800	<1.0	0.17	1.0	9,390	0.53	5.00	29,500	2,990	0.47	1.38	<0.40	183,000	<0.0040	8.33	0.0587	5.17	<6.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	D	14.2	<0.50	7.5	383	<0.50	1,260	<0.050	311,000	<0.50	0.218	0.50	994	<0.30	<20	310,000	4,600	<2.0	0.55	<2.0	3,570,000	<0.050	<5.0	0.112	6.02	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	T	1,340	1.03	12.2	755	<0.50	1,330	0.227	465,000	2.63	1.61	6.48	16,100	3.62	<20	473,000	6,190	<2.0	6.51	<2.0	4,720,000	<0.050	51.3	0.285	11.7	47.1
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	D	15.0	0.161	2.96	32.6	0.0092	129	<0.0050	63,100	<0.50	0.108	0.30	9,010	<0.050	4.88	42,700	3,270	0.247	0.46	0.33	307,000	<0.0020	1.06	0.0309	3.78	3.7
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	T	18.5	0.204	3.37	35.7	0.0100	145	<0.0050	62,800	<0.50	0.060	<0.60 U	7,690	<0.15 U	5.52	41,900	3,190	0.510	0.27	0.32	308,000	<0.0020	1.42	0.0456	3.93	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-14	D	12.8	0.134	1.43	21.9	<0.010	276	<0.010	75,100	<1.0	0.10	<0.40	7,640	<0.10	9.97	81,400	3,220	<0.10	<0.40	<0.40	574,000	<0.0040	0.72	0.0586	2.19	3.9
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Mar-14	T	255	0.270	1.80	22.5	0.012	216	0.032	59,100	<1.0	0.12	1.0	7,600	0.27	8.42	59,500	2,840	0.33	0.51	<0.40	402,000	<0.0040	8.11	0.0640	3.27	6.7
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	D	16.9	0.123	2.78	14.0	0.0078	105	0.0089	45,300	<0.50	0.052	0.42	4,820	<0.050	7.36	30,700	2,810	0.425	0.42	<0.20	171,000	<0.0020	1.11	0.0770	4.26	3.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	T	61.8	0.179	2.65	15.8	0.0081	118	0.0124	40,500	0.60	0.072	0.53	5,570	0.201	8.04	23,500	2,280	0.807	0.27	0.25	106,000	<0.0020	3.80	0.111	4.32	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	11.4	<0.50	7.6	754	<0.50	2,130	0.056	586,000	<0.50	0.188	<0.50	275	<0.30	23	799,000	8,650	<2.0	0.84	<2.0	6,270,000	<0.050	<5.0	0.089	4.86	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	T	49.8	0.83	12.3	830	<0.50	1,560	<0.050	585,000	<0.50	0.188	1.00	2,820	0.49	<20	817,000	8,420	<2.0	0.58	<2.0	6,050,000	<0.050	<5.0	0.223	5.04	6.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	12.7	0.106	2.06	16.5	0.0087	129	0.0169	57,100	<0.50	<0.050	<0.20	8,780	<0.050	3.97	31,700	4,520	0.113	0.30	0.47	207,000	<0.0020	1.02	0.0199	3.88	1.6
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	78.7	0.163	2.27	17.6	0.0079	137	0.0165	58,600	<0.50	0.089	0.67	8,930	0.213	4.64	32,700	4,620	0.328	1.01	0.30	207,000	<0.0020	3.35	0.0234	4.29	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	D	10.8	0.081	0.61	6.06	<0.010	219	<0.010	73,100	<1.0	<0.10	<0.40	5,640	<0.10	6.03	72,800	4,020	<0.10	0.49	0.49	494,000	<0.0040	0.98	0.0083	3.96	14.80
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	T	46.6	0.180	1.10	36.2	<0.010	195	0.022	70,100	<1.0	<0.10	<1.0	8,930	0.20	6.19	62,900	4,250	0.28	<0.40	<0.40	396,000	<0.010	3.20	0.0199	5.06	<6.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	D	8.0	<0.50	4.1	815	<0.50	1,220	<0.050	779,000	<0.50	0.089	<0.50	333	<0.30	<20	725,000	16,100	<2.0	<0.50	<2.0	5,030,000	<0.050	<5.0	<0.050	4.89	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Jun-15	T	17.8	<0.50	5.4	824	<0.50	1,240	<0.050	793,000	<0.50	0.168	<0.50	1,380	<0.30	<20	750,000	16,700	<2.0	<0.50	<2.0	5,110,000	<0.050	<5.0	<0.050	5.32	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	13.1	<0.50	11	551	<0.50	2,060	<0.050	450,000	0.52	0.271	<0.50	66	<0.30	<20	703,000	4,770	<2.0	0.77	<2.0	5,500,000	<0.050	<5.0	0.071	5.37	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	86.9	1.40	19.8	422	<0.50	1,760	<0.050	380,000	1.29	0.439	1.63	4,180	0.52	<20	561,000	4,420	<2.0	1.48	<2.0	4,540,000	<0.050	10.2	0.085	6.60	6.20
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	11.7	0.050	0.73	39.4	<0.010	317	<0.010	76,400	<1.0	<0.10	<0.40	1,080	<0.10	5.49	68,700	3,690	<0.10	<0.40	<0.40	735,000	<0.0040	1.24	0.0064	4.97	4.30
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	21.1	0.077	0.74	---	0.011	286	0.018	64,900	<1.0	<0.10	<1.0	2,690	<0.10	6.23	57,400	3,620	0.21	<0.40	<0.40	549,000	<0.010	1.98	0.0083	4.98	<6.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	21.6	0.053	1.02	20.3	<0.010	231	<0.010	35,100	<1.0	<0.10	<0.40	413	<0.10	5.37	58,200	1,080	<0.10	<0.40	1.01	499,000	<0.0040	1.80	0.0240	5.28	<2.0
DUP-7 (P5.5-3R)	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	21.7	0.055	0.93	25.9	<0.010	283	<0.010	44,200	<1.0	<0.10	<0.40	363	<0.10	5.95	74,700	1,200	<0.10	<0.40	<0.40	614,000	<0.0040	1.88	0.0243	4.96	<2.0
QA/QC RPD										Duplicates	D	0%	4%	9%	24%	---	20%	---	23%	---	---	---	13%	---	10%	25%	11%	---	---	---	21%	---	4%	1%	6%	---
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	965	0.459	2.90	76.1	0.030	329	0.157	63,200	3.0	0.68	6.9	18,600	2.98	7.50	97,100	1,450	1.01	3.18	0.51	829,000	0.010	37.4	0.121	9.63	41.0
DUP-7 (P5.5-3R)	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	941	0.327	2.95	77.8	0.032	378	0.148	73,300	2.9	0.67	7.4	19,200	3.18	7.86	106,000	1,560	1.00	3.47	<0.40	831,000	0.014	35.9	0.130	10.5	48.6
QA/QC RPD										Duplicates	T	3%	34%	2%	2%	6%	14%	6%	15%	3%	1%	7%	3%	6%	5%	9%	7%	1%	9%	---	0%	---	4%	7%	9%	17%
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	D	10.9	0.191	0.463	21.3	<0.0050	231	<0.0050	86,700	<0.50	<0.050	<0.20	405	0.062	12.8	91,200	2,090	1.09	0.47	<0.20	465,000	<0.0020	0.49	0.0837	1.93	4.7
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	20-May-16	T	21.4	0.193	0.66	71.1	<0.010	225	<0.010	129,000	<1.0	0.11	<1.0	3,480	0.28	14.3	119,000	4,380	1.77	1.06	<0.40	577,000	<0.010	1.78	0.221	1.59	<6.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	19.4	<0.50	<2.0	268	<0.50	1,110	0.068	538,000	<0.50	0.145	<0.50	182	<0.30	25	560,000	9,060	<2.0	1.10	3.8	3,540,000	<0.050	<5.0	<0.050	5.44	<3.0
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	64.7	<0.50	<2.0	307	<0.50	1,080	0.106	556,000	<0.50	0.253	0.99	1,080	0.37	25	544,000	10,300	<2.0	1.50	<2.0	3,300,000	<0.050	<5.0	<0.050	6.75	14.4
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	D	15.6	0.067	0.24	50.9	<0.010	258	<0.010	139,000	<1.0	<0.10	<0.40	1,880	<0.10	11.7	134,000	3,740	<0.10	<0.40	0.90	702,000	<0.0040	0.99	0.0144	4.49	4.7
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	23-Nov-16	T	92.5	0.412	0.66	52.5	<0.010	217	0.025	129,000	<1.0	0.13	<1.0	3,250	0.46	11.6	124,000	4,200	0.18	0.54	<0.40	589,000	<0.010	4.56	0.0248	4.91	11.4
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	24.8	0.037	0.300	21.5	0.0083	280	0.0063	30,400	<0.50	<0.050	<0.20	351	0.084	4.8	44,200	715	0.064	0.33	0.4	435,000	<0.0020	2.06	0.0252	6.01	3.5
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	97.2	0.199	0.433	24.0	0.0088	301	0.0292	35,600	0.62	0.092	0.70	759	0.296	5.28	55,200	729	0.173	0.82	<0.20	490,000	<0.0050	4.93	0.0406	6.77	7.8
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	5.1	<0.50	<2.0	181	<0.50	1,100	<0.050	229,000	<0.50	<0.050	<0.50	1,640	<0.30	26	288,000	4,060	<2.0	<0.50	<2.0	2,630,000	<0.050	<5.0	0.093	2.53	<3.0
DUP-5 (P5.5-3R)	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	6.1	<0.50	<2.0	183	<0.50	1,140	0.055	234,000	<0.50	<0.050	<0.50	1,810	<0.30	27	287,000	4,390	<2.0	<0.50	<2.0	2,670,000	<0.050	<5.0	0.091	3.17	<3.0
QA/QC RPD										Duplicates	D	18%	---	---	1%	---	4%	---	2%	---	---	---	10%	---	4%	0%	8%	---	---	---	2%	---	---	2%	22%	---
P5.5-3R	Porewater EAZ	P5.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	347	<0.50	3.2	237	<0.50	950	0.095	357,000	1.31	0.478	3.76	11,300	1.55	33	446,000	8,040	<2.0	1.28	<2.0	2,600,000	<0.050	22.5	0.072	5.78	22.8
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Sep-11	D	<3.0	0.052	0.177	318	<0.0050	123	0.124	202,000	<0.50	20.8	<0.50	406	<0.050	6.43	149,000	8,180	0.95	9.09	<0.20	336,000	0.0157	<0.20	0.333	<0.050	75.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Nov-11	---													Well Not Sampled												
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Dec-11	D	350	<0.50	<2.0	168	<0.50	<100	0.303	126,000	<0.50	11.2	0.63	514	<0.30	<20	73,700	5,600	<2.0	5.45	<2.0	153,000	<0.050	5.1	0.41	0.68	46.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	D	60.3	0.065	0.226	120	<0.0050	75.6	0.295	97,800	<0.50	8.15	0.73	90	<0.050	2.84	54,100	3,540	2.06	4.56	<0.20	114,000	0.0342	2.69	0.407	0.476	21.3
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	D	12,800	0.223	5.10	239	0.424	80	0.833	112,000	21.9	21.1	35.9	27,800	8.44	17.5	66,100	4,080	2.27	10.5	<1.0	155,000	0.133	445	1.05	62.2	95
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	26-Mar-12	D	19.0	0.106	0.359	73.5	<0.0050	69.4	0.164	80,200	<0.50	4.81	0.93	54	<0.050	1.36	33,600	1,640	1.37	2.48	<0.20	70,800	0.0230	0.84	0.230	0.541	57.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Apr-12	D	<3.0	0.047	0.778	81.9	<0.0050	98.0	0.0498	85,100	<0.50	10.6	3.37	353	<0.050	4.83	53,500	3,330	0.731	2.37	<0.20	187,000	0.0253	<0.20	0.236	0.206	47.7
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-May-12	D	<5.0	<0.50	<2.0	104	<0.50	1,290	0.343	179,000	<0.50	14.6	1.09	225	<0.30	50	431,000	3,130	4.2	4.26	<2.0	3,490,000	0.093	<5.0	1.01	0.67	13.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jun-12	D	<2.0	0.071	1.23	209	<0.010	123	0.112	135,000	<1.0	36.0	0.70	1,520	<0.10	6.10	116,000	9,750	0.55	6.47	<0.40	433,000	0.0376	<0.40	0.264	0.28	17.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jul-12	D	1.6	0.093	0.862	167	<0.0050	143	0.108	118,000	<0.50	27.5	1.02	235	0.702	5.89	102,000	8,280	0.585	6.96	0.41	421,000	0.0321	<0.20	0.242	0.454	14.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Aug-12	D	<5.0	<0.50	<2.0	283	<0.50	310	<0.050	141,000	<0.50	22.9	0.55	2,060	0.77	<20	151,000	7,840	<2.0	6.49	<2.0	728,000	<0.050	<5.0	0.390	<0.50	19.9
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-12	D	8.7	<0.50	<23	182	<0.50	1,750	0.079	339,000	<0.50	16.6	<0.50	6,880	<0.30	62	566,000	13,700	<2.0	3.51	<4.0	4,200,000	<0.050	<5.0	1.18	1.76	<3.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Oct-12	D	6.7	<0.50	35.8	121	<0.50	1,460	<0.050	275,000	<0.50	2.97	<0.50	999	<0.30	45	361,000	8,960	<2.0	2.4	8.3	2,790,000	<0.050	<5.0	0.397	2.38	<3.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Dec-12	D	4.7	0.095	8.21	31.2	<0.010	376	<0.010	98,000	<1.0	0.80	<0.40	178	<0.10	10.3	91,200	4,270	0.13	1.36	0.67	473,000	<0.0040	2.03	0.133	1.12	<2.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Jan-13	D	2.7	0.074	5.39	100	<0.010	305	0.012	177,000	<1.0	3.59	<0.40	1,120	<0.10	12.3	176,000	11,200	<0.10	4.20	1.63	722,000	<0.0040	0.87	0.129	0.94	3.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	---													Well Not Sampled												
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-13	D	2.7	0.065	1.83	88.0	<0.010	246	0.030	153,000	<1.0	4.34	<0.40	775	<0.10	12.0	130,000	12,600	<0.10	1.25	0.56	828,000	<0.0040	0.65	0.0702	0.33	2.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Jun-13	D	3.4	0.061	1.11	89.1	<0.010	314	0.057	136,000	<1.0	0.64	<0.40	558	<0.10	10.8	114,000	9,730	<0.10	2.38	0.59	735,000	<0.0040	0.67	0.0409	0.38	3.6
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Jun-13	T	639	2.10	2.38	100	0.018	312	0.164	138,000	1.1	2.35	2.5	2,620	14.1	11.6	117,000	9,650	0.39	3.65	<0.40	740,000	0.0067	29.6	0.273	3.57	76.1
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Sep-13	D	2.2	0.116	1.60	180	<0.010	237	<0.010	169,000	<1.0	2.17	<0.40	566	<0.10	9.51	157,000	11,700	<0.10	0.83	1.90	816,000	<0.0040	<0.40	0.0676	0.31	<2.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Sep-13	T	733	0.535	2.14	197	0.025	231	0.126	164,000	1.3	5.63	2.4	---	1.27	10.7	156,000	11,100	0.62	<2.0 U	<0.40	789,000	0.0058	38.1	0.350	4.00	26.6 J+
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Dec-13	D	2.0	0.070	1.16	227	<0.010	217	<0.010	179,000	<1.0	20.6	<0.40	2,420	<0.10	5.75	166,000	12,900	0.24	1.17	<0.50	854,000	<0.0040	<0.40	0.142	0.17	3.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Dec-13	T	1,030	0.358	2.97 J+	250	0.041	216	0.254	174,000	1.6	27.3	4.3	5,770	1.98	7.31	163,000	12,600	1.12	3.21	<0.50	823,000	0.0081	46.9	0.7	6.49	34.3
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	D	<5.0	<0.50	<2.0	130	<0.50	190	<0.050	106,000	<0.50	12.6	<0.50	1,600	<0.30	<20	104,000	9,500	<2.0	0.64	<2.0	649,000	<0.050	<5.0	0.105	<0.50	<3.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	T	39.0	<0.50	<2.0	137	<0.50	220	<0.050	108,000	<0.50	13.5	<0.50	1,660	<0.30	<20	104,000	9,750	<2.0	0.67	<2.0	684,000	<0.050	<5.0	0.123	<0.50	<3.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	D	2.5	0.052	1.10	154	<0.010	232	<0.010	133,000	<1.0	0.38	<0.40	188	<0.10	5.94	85,800	7,460	<0.10	0.94	<0.40	679,000	<0.0040	<0.40	0.0378	0.16	2.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	T	1,140	0.215	1.86	166	0.033	239	0.156	129,000	1.6	6.98	3.0	3,460	4.57	7.94	80,300	6,670	0.54	3.28	<0.40	618,000	0.0082	49.3	0.382	5.88	24.9
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-14	D	<2.0	0.079	0.84	215	<0.010	223	0.021	163,000	<1.0	2.12	<0.40	1,230	<0.10	6.81	130,000	11,700	0.31	1.27	0.41	753,000	<0.0040	<0.40	0.250	0.52	2.4
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-14	T	3,790	0.468	3.10	293	0.142	244	0.491	205,000	4.5	24.6	8.9	12,900	9.23	15.4	122,000	10,600	1.97	9.79	<0.40	702,000	0.0184	106	1.82	21.3	79.7
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Dec-14	D	<2.0	0.076	0.57	412	<0.010	199	<0.010	241,000	<1.0	6.40	<0.40	4,260	<0.10	5.05	224,000	20,400	0.15	1.46	0.92	974,000	<0.0040	<0.40	0.0875	0.12	2.1
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Dec-14	T	174	0.168	0.92	393	<0.010	208	0.033	225,000	<1.0	8.57	<1.0	4,560	0.25 J+	4.80	209,000	19,400	0.38	1.52	0.57	916,000	<0.0040	8.18	0.186	0.93	<6.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	D	<2.0	0.083	0.65	216	<0.010	174	0.056	148,000	<1.0	7.96	<0.40	2,350	<0.10	3.04	124,000	12,600	0.31	0.49	1.07	840,000	<0.0040	<0.40	0.0746	0.17	3.70
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Mar-15	T	2,240	0.368	4.01	266	0.104	185	0.544	161,000	3.8	34.7	8.2	11,000	7.49	6.58	121,000	11,700	2.07	5.98	<0.40	800,000	0.017	130	1.66	20.1	87.50
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	D	<2.0	0.119	1.14	170	<0.010	213	<0.010	129,000	<1.0	3.28	<0.40	371	<0.10	3.96	94,100	8,600	0.44	0.40	0.44	726,000	<0.0040	<0.40	0.284	0.95	3.4
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	T	219	0.138	1.05	176	0.010	213	0.045	128,000	<1.0	5.14	<1.0	1,050	0.43	4.09	92,800	8,700	0.48	0.70	<0.40	722,000	<0.010	9.86	0.242	1.56	7.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-15	D	<5.0	<0.50	<2.0	682	<0.50	360	<0.050	463,000	<0.50	8.58	<0.50	6,630	<0.30	<20	426,000	38,100	<2.0	1.06	<2.0	1,660,000	<0.050	<5.0	0.156	<0.50	8.2
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-15	T	645	<0.50	<2.0	659	<0.50	400	0.120	452,000	1.02	15.1	1.92	8,040	1.32	<20	411,000	36,600	<2.0	1.95	<2.0	1,620,000	<0.050	29.8	0.339	3.55	16.9
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	448	<0.50	290	<0.050	371,000	<0.50	25.8	<0.50	2,270	<0.30	<20	354,000	29,800	<2.0	1.63	<2.0	1,710,000	<0.050	<5.0	0.131	<0.50	10.1
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Dec-15	T	611	<0.50	<2.0	476	<0.50	340	0.190	368,000	0.88	35.0	2.86	4,580	0.84	<20	348,000	30,100	<2.0	3.23	<2.0	1,680,000	<0.050	29.6	0.303	4.40	25.6
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	D	<5.0	<0.50	<2.0	423	<0.50	260	0.114	356,000	<0.50	8.78	0.99	301	<0.30	<20	318,000	25,600	<2.0	1.32	<2.0	1,480,000	<0.050	<5.0	0.262	<0.50	16.5
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	T	139	<0.50	<2.0	456	<0.50	240	0.074	343,000	<0.50	10.6	1.23	1,610	0.49	<20	310,000	24,400	<2.0	1.18	<2.0	1,450,000	<0.050	8.4	0.300	1.11	12.0
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-May-16	D	<5.0	<0.50	<2.0	241	<0.50	360	<0.050	221,000	<0.50	11.5	<0.50	1,560	<0.30	<20	203,000	17,900	<2.0	0.51	<2.0	1,390,000	<0.050	<5.0	0.153	<0.50	4.9
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-May-16	T	506	<0.50	<2.0	258	<0.50	320	0.107	220,000	0.52	28.3	1.81	5,530	1.03	<20	192,000	17,600	<2.0	2.33	<2.0	1,270,000	<0.050	26.1	0.325	2.45	12.8
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Aug-16	D	<5.0	<0.50	<2.0	264	<0.50	480	<0.050	254,000	<0.50	6.58	1.06	1,030	<0.30	<20	230,000	15,000	<2.0	1.11	<2.0	1,620,000	<0.050	<5.0	0.169	0.63	5.4
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Aug-16	T	9,240	1.11	11.9	443	<0.50	440	1.96	346,000	12.1	177	34.7	40,400	24.2	<20	238,000	15,800	7.0	25.8	<2.0	1,530,000	0.077	317	6.06	77.2	315
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	21-Nov-16	D	<5.0	<0.50	<2.0	369	<0.50	440	<0.050	293,000	<0.50	2.18	<0.50	2,170	<0.30	<20	280,000	18,900	<2.0	<0.50	<2.0	1,950,000	<0.050	<5.0	0.104	<0.50	5.4
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	21-Nov-16	T	7,130	0.62	8.7	447	<0.50	470	0.895	342,000	12.0	113	24.4	29,800	23.9	21	293,000	18,400	5.9	16.8	<2.0	1,920,000	0.052	231	3.48	38.0	175
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-17	D	<2.0	0.051	0.38	83.1	<0.010	285	0.022	171,000	<1.0	0.44	0.40	144	0.12	3.82	113,000	849	0.17	<0.40	<0.40	969,000	<0.0040	<0.40	0.176	0.11	7
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-17	T	3,030	0.204	2.08	133	0.137	304	0.306	189,000	3.3	27.3	4.8	9,970	12.5	10.4	111,000	2,790	1.44	5.18	<0.40	936,000	0.012	67.1	1.18	17.8	92
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	D	<2.0	0.042	0.53	83.7	<0.010	334	<0.010	85,900	<1.0	1.11	<0.40	471	<0.10	2.80	58,200	5,340	0.59	<0.40	0.87	881,000	<0.0040	<0.40	0.0697	0.19	4.7
P6-8S	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	T	138	0.097	0.72	90.7	<0.010	355	0.034	85,300	<1.0	3.84	1.2	1,040	0.41	3.40	57,600	5,230	0.64	0.78	<0.40	842,000	<0.010	8.09	0.118	1.40	8.9
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Sep-11	D	3.1	0.102	0.444	69.2	<0.0050	60.4	0.0809	69,000	<0.50	0.54	0.71	<3.0	<0.050	3.27	26,900	808	3.07	1.74	<0.20	33,000	0.0107	<0.20	0.767	0.206	10.0
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	D	<5.0	<0.50	<2.0	79.7	<0.50	<10	0.174	78,600	<0.50	0.863	0.76	<10	<0.30	<20	28,800	1,020	2.7	3.1	<2.0	32,100	<0.050	<5.0	0.919	<0.50	45.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	D	<5.0	<0.50	<2.0	90.3	<0.50	<100	0.095	86,700	<0.50	0.918	0.51	<30	<0.30	<20	31,700	974	<2.0	2.74	<2.0	29,700	<0.050	<5.0	0.729	<0.50	41.0
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jan-12	D	3.8	0.059	0.289	85.7	<0.0050	56.5	0.0731	89,700	<0.50	1.31	0.66	<30	<0.050	3.02	33,000	1,010	1.22	2.28	<0.20	29,300	0.0172	<0.20	0.559	0.374	20.9
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	D	<3.0	0.040	0.306	70.3	<0.0050	45.4	0.0326	86,700	<0.50	1.34	0.68	<30	0.102	1.85	31,300	905	0.802	1.90	<0.20	29,900	0.0122	<0.20	0.414	0.146	24.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	D	<3.0	0.035	0.198	79.9	<0.0050	52.3	0.0164	77,700	<0.50	0.951	<0.50	<30	<0.050	1.41	28,600	617	0.365	1.01	<0.20	26,500	0.0155	<0.20	0.194	<0.050	12.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	D	<3.0	0.023	0.394	90.8	<0.0050	110	0.0476	84,100	<0.50	0.478	0.65	802	0.068	3.08	44,600	559	0.367	1.30	<0.20	147,000	0.0095	<0.20	0.201	<0.050	8.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	D	4.3	0.019	0.475	76.9	<0.0050	53.5	0.0113	82,000	<0.50	0.539	<0.50	510	<0.050	1.61	32,600	550	0.336	0.79	<0.20	44,100	0.0099	0.25	0.170	<0.050	9.4
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	D	<1.0	0.025	0.393	82.3	<0.0050	71.6	0.0155	81,400	<0.50	0.749	0.34 J	401	<0.050	2.37	35,500	685	0.449	1.09	<0.20	85,300	0.0130	<0.20	0.196	<0.050	32.2
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	D	<1.0	0.026	0.41	81.5	<0.0050	88.1	0.0167	79,900	<0.50	0.826	0.63	145	<0.050	2.82	41,300	584	0.498	1.07	<0.20	123,000	0.0119	<0.20	0.202	<0.050	7.3
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	D	<2.0	0.030	0.49	128	<0.010	275	0.020	86,300	<1.0	0.97	0.48	411	<0.10	8.98	88,700	669	0.86	1.20	<0.40	521,000	0.0196	<0.40	0.316	<0.10	6.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	D	<5.0	<0.50	<2.0	55.1	<0.50	1,590	<0.050	176,000	<0.50	0.801	<0.50	746	<0.30	59	409,000	436	4.6	2.86	<2.0	3,790,000	<0.050	<5.0	1.28	1.11	7.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	D	<5.0	<0.50	<2.0	49.2	<0.50	2,500	0.054	233,000	<0.50	0.072	0.76	48	<0.30	89	553,000	28.1	5.3	3.34	<2.0	5,050,000	<0.050	<5.0	1.51	0.78	4.1
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	D	<1.0	0.042	1.24	39.9	<0.0050	131	<0.0050	53,600	<0.50	0.984	0.30	112	<0.050	5.06	31,900	678	0.986	0.79	<0.20	146,000	<0.0020	<0.20	0.267	0.299	3.1
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	D	<1.0	0.030	1.02	49.8	<0.0050	170	<0.0050	70,300	<0.50	0.531	<0.20	562	<0.050	4.73	49,300	406	0.536	0.59	<0.20	197,000	<0.0020	<0.20	0.220	0.157	2.6
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	D	<5.0	<0.50	<2.0	143	<0.50	1,370	0.112 J	208,000	<0.50	0.508	<0.50 UJ	137	<0.30	44	373,000	340	2.7	1.59 J	<2.0	3,050,000	<0.050	<5.0	1.04	<0.50	4.2 J
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	D	<1.0	0.019	0.350	81.0	<0.0050	66.6	0.0932	93,100	<0.50	0.435	0.60	391	<0.050	1.94	39,700	623	0.303	0.85	<0.20	76,900	<0.0020	<0.20	0.149	0.056	6.6
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	D	<1.0	0.018	1.13	76.3	<0.0050	77.9	0.0142	82,400	<0.50	0.521	0.44	1,890	<0.050	1.64	35,400	439	0.341	0.86	<0.20	57,300	0.0020	<0.20	0.154	<0.050	7.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	D	<1.0	0.036	1.10	99.0	<0.0050	76.4	0.0093	83,800	<0.50	0.798	0.41	2,390	<0.050	1.55	34,100	623	0.359	1.06	<0.20	50,900	0.0021	<0.20	0.152	<0.050	5.2
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	D	<5.0	<0.50	<2.0	178	<0.50	500	<0.050	139,000	<0.50	0.649	<0.50	2,260	<0.30	<20	155,000	772	<2.0	1.24	<2.0	1,080,000	<0.050	<5.0	0.424	<0.50	4.2
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	D	<1.0	0.037	0.848	98.8	<0.0050	63.0	0.0073	86,100	<0.50	0.693	0.26	2,170	<0.050	1.16	35,900	642	0.268	0.94	<0.20	52,400	<0.0020	<0.20	0.134	<0.050	5.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	D	1.5	0.033	2.53	111	<0.0050	78.6	0.0067	83,500	<0.50	0.525	0.45	5,320	<0.050	1.58	32,100	576	0.366	0.93	<0.20	48,100	<0.0020	<0.20	0.136	0.119	2.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	D	<1.0	0.018	1.00	118	<0.0050	84.6	0.0054	88,800	<0.50	0.710	0.25 J	2,630	<0.050	1.20	35,100	720	0.288	1.11	<0.20	52,300	<0.0020	<0.20	0.148	0.055	1.8 J
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	D	<1.0	0.033	0.547	122	<0.0050	72.5	<0.0050	98,900	<0.50	0.667	0.50	1,020	<0.050	1.04	37,500	743	0.258	1.66	<0.20	53,400	0.0023	<0.20	0.123	0.108	3.1
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	D	9.9	0.061	6.64	66.7	<0.0050	204	0.0152	88,000	<0.50	0.299	0.59	10,300	0.057	4.21	57,500	701	0.829	0.45	<0.20	238,000	<0.0020	<0.20	0.382	1.68	8.9
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	D	1.8	0.029	1.28	94.5	<0.0050	77.9	0.0052	94,100	<0.50	0.234	<0.20	2,360	<0.050	1.17	35,700	637	0.152	0.21	<0.20	58,800	<0.0020	<0.20	0.112	0.208	2.4
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	D	2.1	0.048	0.836	124	<0.0050	89.4	0.0075	116,000	<0.50	0.234	0.74	863	0.052	1.80	45,500	757	0.098	0.63	<0.20	94,500	<0.0020	<0.20	0.0869	0.122	8.3
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	D	<1.0	0.048	0.263	140	<0.0050	116	0.0166	137,000	<0.50	0.218	0.41	110	<0.050	1.22	55,200	817	0.162	0.44	<0.20	115,000	<0.0020	<0.20	0.0755	0.070	5.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	D	<1.0	0.033	0.999	128	<0.0050	209	0.0459	117,000	<0.50	0.356	0.36	1,890	<0.050	5.88	79,000	593	0.487	0.42	<0.20	347,000	<0.0020	<0.20	0.315	0.053	3.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-May-16	D	1.0	0.031	0.639	112	<0.0050	79.5	0.0119	120,000	<0.50	0.225	0.47	1,310	<0.050	1.27	47,500	754	0.089	0.38	<0.20	87,200	<0.0020	<0.20	0.122	0.080	6.5
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	D	<2.0	0.064	0.71	157	<0.010	378	<0.010	159,000	<1.0	0.62	<0.40	772	<0.10	13.2	141,000	887	0.83	1.09	<0.40	851,000	0.0117	<0.40	0.345	<0.10	3.2
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	21-Nov-16	D	1.3	0.049	1.24	126	<0.0050	69.0	0.0051	123,000	<0.50	0.236	0.36	3,650	<0.050	1.48	48,000	840	0.113	0.36	<0.20	73,200	<0.0020	<0.20	0.108	0.055	9.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	D	9.2	0.017	0.720	127	<0.0050	68.8	0.0068	118,000	<0.50	0.284	0.24	3,280	0.076	1.22	44,600	717	0.199	0.41	<0.20	62,400	<0.0020	0.25	0.204	0.066	1.7
P6-8I	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	D	<1.0	0.014	1.06	118	<0.0050	61.8	<0.0050	121,000	<0.50	0.165	<0.20	5,090	<0.050	0.86	44,300	772	0.171	0.21	<0.20	56,800	<0.0020	<0.20	0.138	<0.050	1.3
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11	D	9.9	0.045	0.41	59.3	<0.0050	63.2	0.0367	71,500	<0.50	0.221	<0.50	<3.0	<0.050	1.68	22,900	521	2.18	0.64	<0.20	24,400	0.0075	<0.20 UJ	0.211	0.628	<3.0
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11	D	5.3	<0.50	<2.0	54.2	<0.50	<10	0.106	73,000	<0.50	0.262	0.54	<10	<0.30	<20	23,000	465	<2.0	0.88	<2.0	23,300	<0.050	<5.0	0.204	0.58	18.7
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Dec-11	D	<5.0	<0.50	<2.0	55.9	<0.50	<100	0.052	73,100	<0.50	0.263	<0.50	<30	<0.30	<20	23,000	446	<2.0	1.18	<2.0	20,500	<0.050	<5.0	0.208	<0.50	38.3
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	D	4.5	0.05	0.431	54.9	<0.0050	65.1	0.0554	74,900	<0.50	0.267	<0.50	<30	<0.050	<1.0	24,200	431	1.72	1.14	<0.20	20,900	0.0075	<0.20	0.2	0.618	5.8
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	D	33.9	0.022	0.533	52.4	<0.0050	60.6	0.0187	77,200	<0.50	0.605	<0.50	59	0.108	0.57	25,400	682	0.919	0.60	<0.20	23,700	0.0043	1.10	0.154	0.346	163
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12	D	4.5	0.036	0.379	52.8	<0.0050	59.5	0.0315	73,600	<0.50	0.336	<0.50	<30	<0.050	0.55	23,100	536	0.927	0.79	<0.20	18,500	0.0073	<0.20	0.158	0.399	10.1
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	D	<3.0	<0.010	0.384	53.8	<0.0050	81.8	<0.0050	76,900	<0.50	0.357	<0.50	352	<0.050	1.60	29,600	547	0.461	0.32	<0.20	69,600	0.0035	<0.20	0.176	<0.050	7.2
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	D	<3.0	0.014	0.602	54.0	<0.0050	59.9	0.0081	79,400	<0.50	0.315	<0.50	403	<0.050	0.86	26,300	495	0.418	0.36	<0.20	40,300	0.0028	<0.20	0.157	<0.050	14.7
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	D	2.2 J	0.023 J	0.516	54.1	<0.0050	59.6	0.0070 J	78,500	<0.50	0.248	<0.20	439	<0.050	0.80	24,000	555	0.543	0.43	<0.20	28,600	<0.0020	<0.20	0.167	0.059 J	6.0 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jul-12	D	1.9	0.040	0.431	52.2	<0.0050	76.5	0.0129	77,700	<0.50	0.291	0.57	103	0.076	1.02	29,300	537	0.446	0.48	<0.20	51,800	<0.0020	<0.20	0.132	0.081	6.3
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Aug-12	D	5.8	<0.50	2.3	83.5	<0.50	590	<0.050	104,000	<0.50	0.409	<0.50	2,250	<0.30	<20	153,000	561	<2.0	0.50	<2.0	1,200,000	<0.050	<5.0	0.492	0.53	3.5
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-12	D	<5.0	<0.50	2.0	21.7	<0.50	3,770	<0.050	300,000	<0.50	0.134	0.67	39	<0.30	136	868,000	67.7	8.9	0.97	2.7	7,790,000	0.247	<5.0	2.52	1.21	3.2
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	D	<5.0	<0.50	2.6	54.3	<0.50	1,160	<0.050	117,000	<0.50	0.132	<0.50	265	<0.30	36	209,000	651	<2.0	<0.50	<2.0	2,190,000	<0.050	<5.0	0.880	0.61	<3.0
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	D	5.5 J	0.035	1.34	14.9	<0.0050	212	<0.0050	17,400	<0.50	0.067	<0.20	299	<0.050	4.29	14,100	130	0.955	0.30	<0.20	214,000	<0.0020	<0.20	0.205	0.280	<1.0
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	D	2.7	0.027	1.76	15.8	<0.0050	158	<0.0050	22,900	<0.50	0.142	<0.20	481	<0.050	2.18	14,500	179	0.689	0.39	<0.20	125,000	<0.0020	<0.20	0.170	0.121	2.4 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Jan-13	D	1.9	0.050	1.01	18.0	<0.0050	140	<0.0050	24,600	<0.50	0.232	0.45	40	<0.050	2.02	15,000	182	0.945	1.78	<0.20	111,000	<0.0020	<0.20	0.181	0.208	10.2
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13	D	1.7 J	0.032	0.700	23.7	<0.0050	146	<0.0050 UJ	43,600	<0.50	0.230 J	<0.20 UJ	171	<0.050	5.21	42,300	362	0.670	0.43 J	<0.20	263,000	<0.0020	<0.20	0.223	0.099	1.2 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	D	1.7 J	0.033	0.920	31.8	<0.0050	96.2	<0.0050 UJ	51,700	<0.50	0.256	<0.20 UJ	344	<0.050	1.73	28,800	311	0.447	0.40	<0.20	69,100	<0.0020	<0.20	0.177	0.168 J	<1.0 UJ
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	D	1.6	0.038 J	0.935	43.6	<0.0050	88.0	<0.0050	58,300	<0.50	0.208	<0.20	507	<0.050	1.32	28,000	354	0.417	0.31 J	<0.20	47,500	<0.0020	<0.20	0.177	0.086 J	<1.0 UJ
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	D	1.6 J	0.201	0.605	34.0	<0.0050	87.0	0.0298	64,100	<0.50	0.188	0.43	94	<0.050	1.80	30,700	152	0.636	0.89	<0.20	56,000	<0.0020	<0.20	0.190	0.144	5.5
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Mar-14	D	<1.0	0.142	0.510	38.4	<0.0050	79.2	0.0208	67,000	<0.50	0.332	0.33	137	<0.050	1.42	30,800	509	0.507	0.64	<0.20	40,200	<0.0020	<0.20	0.175	0.071	5.9
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14	D	2.6 J	0.058	1.98	49.7	<0.0050	78.1	<0.0050	74,800	<0.50	0.387	0.25 J	1,870	<0.050	1.10	29,900	690	0.362	0.61 J	<0.20	29,100	<0.0020	<0.20	0.182	0.184	2.4 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	D	1.3	0.054	0.704	52.2	<0.0050	82.9	0.0161 J	76,600	<0.50	0.280	0.40 J	362	<0.050	1.20	32,000	553	0.288	0.63 J	<0.20	49,700	<0.0020	<0.20	0.179	0.120	3.1 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14	D	1.5 J	0.048	0.770	56.3	<0.0050	72.9	0.0695 J	80,700	<0.50	0.196	0.40 J	432	<0.050	0.78	29,300	497	0.363	0.78 J	<0.20	26,100	<0.0020	<0.20	0.195	0.241	2.4 J
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	D	1.7	0.043	0.492	50.8	<0.0050	70.5	0.0175	81,900	<0.50	0.137	0.37	107	<0.050	0.73	29,100	471	0.334	0.74	<0.20	24,700	<0.0020	<0.20	0.210	0.232	3.1
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Mar-15	D	2.3	0.044	0.483	51	<0.0050	71.4	0.0244	81,300	<0.50	0.151	0.89	107	<0.050	0.74	28,800	458	0.349	0.95	<0.20	24,100	<0.0020	<0.20	0.209	0.253	7.60
QA/QC RPD										Duplicates	D	---	---	2%	0%	---	1%	---	1%	---	---	---	0%	---	---	1%	3%	4%	---	---	2%	---	---	0%	---	---
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Jun-15	D	<1.0	0.052	1.11	53.4	<0.0050	72.0	0.0066	81,700	<0.50	0.201	0.40	732	<0.050	0.79	27,800	620	0.343	0.53	<0.20	21,300	<0.0020	<0.20	0.212	0.181	3.5
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4	4.4	Colluvium	---	15-Jun-15	D	<1.0	0.044	1.15	53.2	<0.0050	72.7	0.0055	83,500	<0.50	0.200	<0.20	788	<0.050	0.79	27,900	616	0.349	0.50	<0.20	21,400	<0.0020	<0.20	0.218	0.164	1.1
QA/QC RPD										Duplicates	D	---	---	4%	0%	---	1%	---	2%	---	---	---	7%	---	---	0%	1%	2%	---	---	0%	---	---	3%	---	---
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	8-Sep-15	D	1.3	0.432	0.426	45.9	<0.0050	65.9	0.0277	85,300	<0.50	0.160	0.74	<30	<0.050	0.85	29,300	375	0.452	1.45	<0.20	23,700	0.0023	<0.20	0.232	0.195	8.0
DUP-3 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	8-Sep-15	D	1.1	0.416	0.449	45.3	<0.0050	66.9	0.0258	85,000	<0.50	0.167	0.59	43	<0.050	0.84	29,500	363	0.460	1.37	<0.20	23,800	0.0025	<0.20	0.235	0.197	7.1
QA/QC RPD										Duplicates	D	---	4%	5%	1%	---	2%	7%	0%	---	---	---	---	---	---	1%	3%	2%	6%	---	0%	---	---	1%	---	12%
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Dec-15	D	87.3	0.068	0.590	56.8	<0.0050	94.0	0.0130	91,900	<0.50	0.228	0.28	433	0.074	0.82	30,700	592	0.474	0.54	<0.20	28,900	<0.0020	0.66	0.186	0.231	3.0
DUP-1 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4	4.4	Colluvium	---	7-Dec-15	D	<1.0	0.047	0.506	46.9	<0.0050	126	0.0129	90,900	<0.50	0.175	0.37	362	<0.050	1.07	31,000	500	0.454	0.51	<0.20	28,700	<0.0020	<0.20	0.185	0.126	4.9
QA/QC RPD										Duplicates	D	---	---	15%	19%	---	29%	---	1%	---	---	---	18%	---	---	1%	17%	4%	---	---	1%	---	---	1%	---	---
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	29-Feb-16	D	1.5	0.098	0.418	57.1	<0.0050	81.9	0.0183	90,000	<0.50	0.238	0.74	86	0.054	0.89	30,600	390	0.664	1.31	<0.20	25,700	<0.0020	<0.20	0.359	0.397	7.2
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-May-16	D	<1.0	0.078	0.319	54.4	<0.0050	74.8	0.0222	94,600	<0.50	0.215	0.40	<30	<0.050	0.84	31,900	534	0.427	0.79	<0.20	25,700	0.0028	<0.20	0.300	0.160	4.5
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	15-Aug-16	D	<2.0	0.079	0.69	82.0	<0.010	459	<0.010	128,000	<1.0	0.30	<0.40	65	<0.10	15.1	137,000	563	1.57	0.90	<0.40	951,000	0.0074	<0.40	0.638	0.39	2.3
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	21-Nov-16	D	1.9	0.027	0.732	59.1	<0.0050	74.0	<0.0050	101,000	<0.50	0.126	<0.20	799	<0.050	0.86	35,200	679	0.258	0.26	<0.20	37,700	<0.0020	<0.20	0.386	0.092	2.1
DUP-1 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4	4.4	Colluvium	---	21-Nov-16	D	1.8	0.046	0.722	62.4	<0.0050	74.4	<0.0050	100,000	<0.50	0.159	0.22	804	<0.050	1.06	35,400	718	0.274	0.37	<0.20	37,900	0.0056	<0.20	0.373	0.097	6.4
QA/QC RPD										Duplicates	D	---	---	1%	5%	---	1%	---	1%	---	---	---	1%	---	---	1%	6%	6%	---	---	1%	---	---	3%	---	---
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	14-Mar-17	D	3.7	0.019	0.644	65.6	<0.0050	66.1	0.0054	107,000	<0.50	0.159	0.21	1,070	0.098	0.63	34,600	685	0.218	0.38	<0.20	25,500	<0.0020	<0.20	0.418	0.076	1.3
P6-8D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	6-Jun-17	D	7.5	0.016	0.638	70.9	<0.0050	65.2	0.0056	115,000	<0.50	0.161	0.94	1,000	<0.050	0.53	36,300	781	0.249	0.26	<0.20	25,100	<0.0020	<0.20	0.429	0.086	2.2
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	26-Sep-11	---	Well Not Sampled																								
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Mar-12	D	5.5	<0.50	<2.0	41.5	<0.50	2,630	0.185	258,000	<0.50	0.074	<0.50	10	1.27	98	699,000	11.9	7.8	3.61	<2.0	5,990,000	<0.050	<5.0	4.66	0.58	208
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-12	D	<5.0	<0.50	<2.0	52.9	<0.50	2,570	1.17	236,000	<0.50	0.217	5.40	65	1.25	113	627,000	65.2	13.9	4.71	<2.0	5,310,000	<0.050	<5.0	9.62	0.64	31.9
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	D	<5.0	<0.50	<2.0	64.7	<0.50	2,930	0.387	317,000	<0.50	0.144	1.62	<10	<0.30	125	855,000	4.00	8.6	3.23	<2.0	6,400,000	0.101	<5.0	5.08	0.53	4.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Dec-12	D	6.8	<0.50	<2.0	37.8	<0.50	2,150	<0.050	157,000	<0.50	0.176	5.72	<10	<0.30	61	459,000	43.0	8.3	2.07	<2.0	4,210,000	<0.050	<5.0	6.13	0.64	4.9
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-13	D	<5.0	<0.50	<2.0	43.3	<0.50	2,620	0.206	231,000	<0.50	0.186	1.45	10	<0.30	98	655,000	31.4	7.4	1.79	<2.0	5,660,000	<0.050	<5.0	5.33	0.56	6.8
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-13	D	<5.0	<0.50	<2.0	47.2	<0.50	2,970	0.140	215,000	<0.50	0.110	1.34	14	<0.30	107	597,000	41.3	8.4	1.85	<2.0	5,050,000	<0.050	<5.0	4.27	0.81	3.3
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-13	T	28.5	<0.50	<2.0	45.6	<0.50	3,000	0.121	223,000	<0.50	0.075	1.28	40	<0.30	105	646,000	27.3	8.3	1.75	<2.0	5,170,000	0.053	<5.0	4.06	0.98	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	D	44.0	<0.50	<2.0	54.9	<0.50	3,330	0.244	327,000	<0.50	0.242	1.28	127	<0.30	130	886,000	24.3	10.0	1.35	<2.0	7,460,000	<0.050	<5.0	3.55	1.09	11.8
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Sep-13	T	6,610	0.84	<5.0	107	<0.50	3,310	0.772	424,000	12.2	3.74	24.2	9,940	12.6	147	866,000	156	12.9	11.0	<2.0	7,230,000	0.089	236	5.71	26.6	71.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	16-Dec-13	D	<5.0	<0.50	<2.0	47.2	<0.50	2,850	0.128	295,000	<0.50	0.085	1.79	<10	<0.30	110	837,000	<0.20	7.2	4.94	<2.0	6,740,000	<0.050	<5.0	3.90	0.53	17.2
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Dec-13	T	6,380	0.657	<8.0	81.3	0.205	2,720	0.996	495,000	10.7	3.72	26.2	11,400	13.1	122	826,000	172	7.48	11.2	1.96	6,690,000	0.0816	219	5.24	27.8	80.2
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-14	D	18.8	<0.50	<2.0	44.0	<0.50	2,810	0.139	262,000	0.50	0.167	2.44	96	<0.30	97	742,000	23.6	7.8	1.41	<2.0	5,880,000	<0.050	<5.0	6.04	0.67	8.9
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Mar-14	T	10,100	0.70	7.3	85.3	<0.50	2,820	1.30	483,000	12.8	5.10	29.4	15,600	20.0	119	720,000	244	8.8	14.0	<2.0	5,740,000	0.129	312	9.01	39.1	269
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	D	<5.0	<0.50	2.6	44.1	<0.50	3,020	<0.050	189,000	<0.50	0.080	1.63	97	<0.30	106	535,000	18.9	8.5	1.46	<2.0	5,010,000	<0.050	<5.0	5.12	1.80	3.5
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Jun-14	T	5.3	<0.50	2.8	46.8	<0.50	3,200	0.070	205,000	<0.50	0.060	0.98	118	<0.30	113	577,000	24.4	8.5	1.37	<2.0	5,320,000	<0.050	<5.0	5.25	1.34	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-14	D	<5.0	<0.50	<2.0	57.2	<0.50	2,950	0.250	310,000	<0.50	<0.050	1.29	<10	<0.30	137	846,000	0.54	5.6	1.44	<2.0	6,840,000	<0.050	<5.0	2.97	0.66	3.9
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-14	T	<5.0	<0.50	<2.0	56.8	<0.50	2,860	0.234	320,000	<0.50	0.051	1.18	<10	<0.30	144	884,000	0.73	5.6	1.30	<2.0	7,050,000	<0.050	<5.0	2.99	0.68	4.1
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	1-Dec-14	---	Sample Not Collected - Insufficient Water for Analysis																								
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	D	<5.0	<0.50	<2.0	48.6	<0.50	2,430	0.120	250,000	<0.50	<0.050	0.96	19	<0.30	84	679,000	3.11	5.8	2.81	<2.0	5,760,000	<0.050	<5.0	4.16	0.58	6.6
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	13-Mar-15	T	217	<0.50	<2.0	52.8	<0.50	2,370	0.135	251,000	<0.50	0.116	0.82	412	<0.30	87	690,000	14.1	4.9	1.88	<2.0	5,740,000	<0.050	7.0	3.52	1.22	6.1
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	D	<5.0	<0.50	7.0	57.6	<0.50	2,770	<0.050	284,000	<0.50	1.31	<0.50	869	<0.30	86	792,000	1,040	4.8	0.83	<2.0	6,050,000	<0.050	<5.0	1.66	2.18	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	18-Jun-15	T	1,930	<0.50	8.7	77.2	<0.50	2,790	0.095	474,000	2.21	2.63	6.14	4,520	2.69	92	793,000	1,120	4.9	2.81	<2.0	6,250,000	<0.050	65.0	2.59	10.5	18.6
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	8-Sep-15	---	Well Not Sampled - Dry																								
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Dec-15	D	<5.0	<0.50	4.3	48.5	<0.50	2,310	<0.050	226,000	<0.50	0.808	0.53	770	<0.30	54	617,000	448	5.7	1.34	<2.0	5,180,000	<0.050	<5.0	1.82	2.03	5.1
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	7-Dec-15	T	10,500	0.61	11.8	144	<0.50	2,290	0.756	1,100,000	5.75	7.04	13.9	24,200	11.5	78	594,000	1,580	8.8	12.1	<2.0	4,960,000	<0.050	207	3.37	48.3	93.8
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	29-Feb-16	D	<5.0	<0.50	2.6	46.9	<0.50	2,180	<0.050	199,000	0.59	0.671	<0.50	681	<0.30	81	580,000	258	6.6	1.22	<2.0	4,690,000	<0.050	<5.0	3.02	2.09	5.8
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	29-Feb-16	T	909	<0.50	2.8	59.5	<0.50	2,200	0.122	240,000	1.31	1.04	2.11	2,600	2.88	75	576,000	370	4.2	1.98	<2.0	4,660,000	<0.050	47.8	2.50	5.09	12.8
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	19-May-16	D	<5.0	<0.50	<2.0	58.2	<0.50	2,620	<0.050	250,000	<0.50	0.217	<0.50	1,010	<0.30	100	694,000	395	3.5	0.80	<2.0	5,560,000	<0.050	<5.0	1.66	<0.50	9.4
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	19-May-16	T	768	<0.50	2.5	64.1	<0.50	2,770	0.095	340,000	0.91	0.748	3.65	3,060	2.19	129	703,000	413	4.1	1.30	<2.0	5,630,000	<0.050	45.7	2.25	4.14	16.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Aug-16	D	<5.0	<0.50	<2.0	52.2	<0.50	2,440	<0.050	260,000	<0.50	0.424	0.55	463	<0.30	102	686,000	395	4.1	6.35	<2.0	5,540,000	<0.050	<5.0	1.51	0.53	4.3
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	17-Aug-16	T	4,870	<0.50	6.3	91.1	<0.50	2,660	0.139	494,000	3.93	3.59	43.9	11,300	9.09	121	661,000	679	5.3	6.91	<2.0	5,080,000	<0.050	250	2.51	22.0	47.6
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	21-Nov-16	D	<5.0	<0.50	<2.0	40.6	<0.50	2,150	<0.050	197,000	<0.50	0.450	<0.50	669	<0.30	86	521,000	150	5.4	1.72	<2.0	4,440,000	<0.050	<5.0	3.20	0.91	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	21-Nov-16	T	2,340	<0.50	3.3	98.0	<0.50	2,170	0.192	704,000	1.34	1.78	4.49	4,930	5.06	99	553,000	399	4.6	3.81	<2.0	4,680,000	<0.050	67.7	2.91	8.85	36.4
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-17	D	12.1	<0.50	<2.0	48.5	<0.50	2,070	<0.050	244,000	<0.50	0.319	<0.50	530	<0.30	88	665,000	99.7	4.3	2.34	<2.0	5,160,000	<0.050	<5.0	2.82	1.30	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	14-Mar-17	T	394	<0.50	<2.0	46.7	<0.50	2,110	<0.050	251,000	0.51	0.427	1.12	1,470	0.84	88	653,000	156	3.5	2.01	<2.0	4,860,000	<0.050	23.4	2.59	2.34	6.1
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-17	D	<5.0	<0.50	<2.0	43.0	<0.50	2,500	<0.050	196,000	<0.50	0.210	1.19	492	<0.30	104	523,000	102	4.2	1.01	<2.0	4,470,000	<0.050	<5.0	1.77	0.84	<3.0
P6-12S	Porewater EAZ	P6-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	6-Jun-17	T	35.5	<0.50	<2.0	48.0	<0.50	2,650	0.053	207,000	<0.50	0.214	<0.50	892	<0.30	115	548,000	138	4.1	0.66	<2.0	4,900,000	<0.050	<5.0	1.52	0.80	<3.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	26-Sep-11	D	18.9	0.075	2.55	8.91	<0.010	720	0.013	9,270	<1.0	0.47	1.9	254	0.23	22.1	24,600	38.2	3.07	0.69	<0.40	649,000	0.0091	17.1	0.891	7.64	6.1
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-11	D	<5.0	<0.50	<2.0	6.5	<0.50	490	<0.050	13,000	<0.50	0.66	<0.50	153	<0.30	27	36,400	43.9	<2.0	0.61	<2.0	612,000	<0.050	<5.0	0.398	2.11	19.1
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	27-Mar-12	D	<6.0	0.049	1.05	3.47	<0.010	366	0.019	11,700	<1.0	0.87	<1.0	90	<0.10	25.9	30,700	68.9	0.81	17.4	<0.40	405,000	0.0065	<0.40	0.285	1.21	123
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	6-Jun-12	D	6.0	0.046	2.22	4.26	<0.010	315	0.027	13,300	<1.0	0.89	0.63	2,350	<0.10	26.4	34,800	88.0	0.78	0.62	<0.40	352,000	<0.0040	0.98	0.205	2.18	57.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-12	D	2.3	0.027	2.18	8.88	<0.010	366	0.029	32,500	<1.0	1.74	<0.40	3,800	<0.10	46.0	81,600	282	0.44	0.89	<0.40	462,000	0.0076	<0.40	0.244	1.08	15.7
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Oct-12	D	<5.0	<0.50	2.6	18.3	<0.50	380	<0.050	77,900	<0.50	3.17	<0.50	12,400	<0.30	66	191,000	567	<2.0	1.41	<2.0	833,000	<0.050	<5.0	0.259	0.61	19.9
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Nov-12	D	<2.0	0.061	1.52	15.3	<0.010	248	0.036	103,000	<1.0	3.73	<0.40	9,850	<0.10	61.8	223,000	1,270	0.19	1.89	<0.40	582,000	<0.0040	<0.40	0.179	0.22	308
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Dec-12	D	<2.0	0.028	2.32	15.6	<0.010	227	0.019	103,000	<1.0	3.78	<0.40	13,100	<0.10	50.0	246,000	1,510	0.20	1.19	<0.40	585,000	<0.0040	<0.40	0.298	0.21	40.4
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	13-Mar-13	D	2.4	0.036	1.59	15.4	<0.0050	197	0.117	98,300	<0.50	3.49	0.57	11,900	<0.050	50.6	218,000	1,520	0.204	1.23	0.24	519,000	<0.0020	0.25	0.318	0.157	51.9
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-13	D	1.7	0.041	2.58	12.8	<0.0050	307	0.0143	72,300	<0.50	2.36	<0.20	9,190	<0.050	55.2	160,000	913	0.284	0.75	<0.20	485,000	<0.0020	<0.20	0.365	0.310	4.9

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-13	T	22,200	0.237	9.28	83.5	0.543	292	0.157	74,800	26.7	13.4	53.1	46,600	10.8	92.0	161,000	1,600	0.681	9.74	0.43	435,000	0.126	900	3.83	122	144
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-Sep-13	D	<2.0	0.047	1.31	17.7	<0.010	362	0.031	105,000	<1.0	2.92	0.54	8,300	<0.10	66.3	201,000	1,140	0.36	1.19	<0.40	685,000	<0.0040	<0.40	0.639	0.24	9.6
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-Sep-13	T	68,300	0.299	12.0	234	1.42	408	0.314	112,000	77.0	38.1	152	108,000	38.1	203	237,000	2,210	0.93	29.1	1.04	695,000	0.376	2,380	10.7	362	276
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	9-Dec-13	D	<5.0	<0.50	<2.0	20.8	<0.50	390	0.067	133,000	<0.50	3.47	<0.50	6,770	<0.30	62	272,000	1,800	<2.0	0.95	<2.0	988,000	<0.050	<5.0	0.486	<0.50	8.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	16-Dec-13	T	5,530	<0.50	<3.0	42.5	<0.50	410	0.053	156,000	6.03	5.31	12.4	14,800	2.88	67	286,000	2,240	<2.0	3.37	<2.0	1,090,000	<0.050	305	1.23	27.4	21.2
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-14	D	<2.0	0.028	1.56	10.3	<0.010	231	0.018	79,900	<1.0	2.07	<0.40	6,320	<0.10	36.2	148,000	1,910	0.40	0.64	<0.40	542,000	<0.0040	<0.40	0.555	0.25	2.4
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	10-Mar-14	T	2,200	0.092	1.95	19.4	0.057	250	0.028	78,600	2.3	2.81	4.4	9,830	1.14	42.4	141,000	1,780	0.48	1.28	<0.40	528,000	<0.010	127	0.773	10.4	6.6 J
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-14	D	5.2	<0.50	2.3	18.4	<0.50	780	<0.050	105,000	<0.50	1.76	1.17	2,480	<0.30	51	216,000	994	<2.0	0.86	<2.0	1,530,000	<0.050	<5.0	1.22	<0.50	4.8
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Jun-14	T	74,300	<0.50	21.8	235	1.47	860	0.318	113,000	78.8	37.7	152	147,000	32.7	180	248,000	2,180	2.9	32.5	<2.0	1,520,000	0.311	2,450	8.22	360	246
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-14	D	<5.0	<0.50	<2.0	17.2	<0.50	490	<0.050	90,400	11.8	1.65	0.70	4,110	<0.30	49	182,000	937	<2.0	0.99	<2.0	947,000	<0.050	<5.0	0.739	0.74	5.5
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	11-Sep-14	T	141,000	<0.50	30.7	493	3.11	620	0.667	136,000	149	79.9	300	272,000	88.0	401	318,000	3,590	2.0	61.4	<2.0	1,190,000	0.783	2,100	17.6	702	579
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	2-Dec-14	D	5.3	0.037	1.75	18.2	<0.010	231	0.016	131,000	<1.0	2.02	<0.40	8,500	<0.10	36.7	200,000	3,330	0.31	0.70	<0.40	626,000	<0.0040	<0.40	0.652	0.29	2.3
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	2-Dec-14	T	90,200	0.292	16.3	331	2.42	301	0.293	140,000	103	52.3	231	135,000	44.1	225	250,000	5,410	1.14	38.7	1.17	666,000	0.424	1,440	10.1	592	242
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	13-Mar-15	D	<2.0	0.061	1.06	11.6	<0.010	201	0.035	98,700	<1.0	1.90	0.74	3,140	<0.10	36.8	156,000	2,490	0.34	1.65	<0.40	551,000	<0.0040	<0.40	0.704	0.18	11.4
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	13-Mar-15	T	10,200	0.243	5.16	60.5	0.297	200	0.081	96,100	13.3	7.19	22.8	23,100	6.12	45.8	153,000	2,930	0.67	7.02	<0.40	513,000	0.046	619	2.08	66.8	42.4
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Jun-15	D	2.2	0.123	2.05	9.78	<0.010	347	<0.010	89,700	<1.0	0.82	<0.40	2,520	0.11	37.6	139,000	1,660	0.92	<0.40	<0.40	847,000	<0.0040	<0.40	0.687	0.841	5.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	15-Jun-15	T	37,100	0.297	12.6	171	1.03	425	0.338	146,000	47.3	18.6	88.5	63,000	27.7	106	177,000	2,570	1.70	19.2	0.90	956,000	0.176	1,220	5.83	195	134
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Sep-15	D	<5.0	<0.50	2.3	32.3	<0.50	490	<0.050	232,000	<0.50	2.80	<0.50	10,100	<0.30	53	337,000	4,970	<2.0	1.19	<2.0	1,430,000	<0.050	<5.0	0.733	0.53	6.8
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	8-Sep-15	T	1,550	<0.50	2.4	38.9	<0.50	510	<0.050	223,000	1.75	3.46	3.18	12,700	1.06	57	323,000	4,940	<2.0	1.65	<2.0	1,390,000	<0.050	94.2	0.869	7.84	5.8
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-15	D	<2.0	0.054	1.58	28.5	0.011	363	0.097	273,000	<1.0	4.10	<0.40	14,400	<0.10	128	339,000	9,540	0.26	0.93	<0.40	838,000	<0.0040	<0.40	0.553	0.18	11.9
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	7-Dec-15	T	5,070	0.124	2.16	39.0	0.096	360	0.102	265,000	3.4	4.78	5.7	18,400	1.56	137	331,000	13,200	0.41	2.90	<0.40	814,000	<0.010	188	1.01	15.5	10.1
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	29-Feb-16	D	<5.0	<0.50	2.3	21.4	<0.50	150	<0.050	173,000	<0.50	3.54	<0.50	15,100	<0.30	30.0	214,000	6,690	<2.0	0.95	<2.0	632,000	<0.050	<5.0	0.815	<0.50	9.2
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	29-Feb-16	T	130,000	<0.50	51.3	584	4.09	220	2.20	382,000	156	102	367	333,000	112	305	237,000	9,390	3.3	82.7	<2.0	620,000	1.02	1,290	23.3	817	702
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-May-16	D	<2.0	0.074	1.74	15.9	<0.010	231	0.034	155,000	<1.0	2.87	<0.40	8,090	0.26	38.6	194,000	6,060	0.36	0.75	<0.40	773,000	<0.0040	<0.40	0.788	0.21	11.3
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	17-May-16	T	2,100	0.085	2.19	24.1	0.064	234	0.054	148,000	2.2	3.45	4.4	10,700	1.36	36.1	185,000	5,720	0.38	1.52	<0.40	727,000	<0.010	112	0.959	9.12	17.4
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	16-Aug-16	T	16,400	<0.50	8.6	93.0	0.53	660	0.125	196,000	13.4	6.89	26.7	32,600	14.2	67	253,000	4,400	2.4	6.96	<2.0	1,480,000	0.092	508	3.30	57.8	47.3
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	16-Aug-16	D	<5.0	<0.50	5.0	15.5	<0.50	620	<0.050	167,000	<0.50	1.72	<0.50	14,200	<0.30	48	250,000	4,270	2.0	0.97	<2.0	1,470,000	<0.050	<5.0	1.37	1.08	6.2
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	21-Nov-16	D	16.2	0.023	2.07	21.4	<0.010	145	<0.010	180,000	<1.0	3.07	<0.40	9,860	<0.10	30.2	196,000	7,280	0.44	0.65	<0.40	799,000	<0.0040	0.75	0.680	0.30	<2.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	21-Nov-16	T	299	<0.060	1.82	22.8	0.013	149	0.012	180,000	<1.0	3.15	<1.0	9,820	0.29	27.3	199,000	7,180	0.42	0.78	<0.40	736,000	<0.010	17.0	0.738	1.43	<6.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	14-Mar-17	D	3.6	0.075	3.40	14.4	<0.010	135	0.012	114,000	<1.0	1.39	<0.40	6,370	<0.10	23.3	122,000	3,950	0.97	0.64	<0.40	553,000	<0.0040	<0.40	0.832	0.63	2.7
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	14-Mar-17	T	9,590	0.302	7.61	49.4	0.276	153	0.087	114,000	8.9	5.66	16.6	28,900	6.32	36.3	126,000	5,310	0.81	4.47	<0.40	540,000	0.037	380	1.91	40.8	32.6
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	5-Jun-17	D	<2.0	0.111	3.72	7.96	<0.010	147	<0.010	80,200	<1.0	0.79	<0.40	---	<0.10	24.0	83,100	2,720	1.56	0.44	<0.40	505,000	<0.0040	<0.40	1.17	1.80	<2.0
P6-12I	Porewater EAZ	P6-12	DS	EB	0.6-0.8	0.6	0.8	Beach sand	---	5-Jun-17	T	8,660	0.187	4.34	50.4	0.339	170	0.103	84,000	8.4	4.55	17.8	---	10.9	38.8	90,000	2,910	0.75	3.90	<0.40	518,000	0.053	271	2.27	38.3	26.9
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	26-Sep-11	D	<6.0	0.072	2.39	12	<0.010	411	0.019	14,500	<1.0	0.7	<1.0	<3.0	<0.10	12.6	18,800	121	3.09	1.31	0.59	468,000	0.0125	<0.40	1.89	1.36	18.7
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	27-Mar-12	D	<6.0	0.093	1.83	11.2	<0.010	339	0.230	35,700	<1.0	1.10	<1.0	<30	<0.10	17.3	50,300	522	2.71	1.30	<0.40	437,000	0.0051	<0.40	2.11	0.43	15.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	6-Jun-12	D	<2.0	0.065	1.09	15.4	<0.010	223	0.034	46,400	<1.0	1.77	0.77	308	<0.10	15.0	64,900	541	1.54	4.04	<0.40	294,000	<0.0040	<0.40	1.71	0.44	20.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-12	D	<2.0	0.036	1.40	23.7	<0.010	284	0.051	104,000	<1.0	1.74	0.41	1,270	<0.10	22.5	170,000	1,330	0.99	1.31	<0.40	446,000	0.0104	<0.40	2.56	0.47	11.4
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Dec-12	D	<2.0	0.071	0.51	17.7	<0.010	212	0.051	101,000	<1.0	1.78	<0.40	229	<0.10	15.3	160,000	2,030	0.95	9.03	<0.40	429,000	0.0048	<0.40	3.37	<0.10	50.9
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	13-Mar-13	D	<1.0	0.033	0.366	12.3	<0.0050	161	0.0283	93,800	<0.50	0.293	0.63	117	<0.050	15.2	131,000	851	0.618	1.20	0.22	400,000	0.0038	<0.20	3.04	0.150	13.9
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-13	D	<1.0	0.045	0.751	7.71	<0.0050	164	0.0175	73,900	<0.50	0.277	0.56	326	<0.050	12.1	94,200	1,290	0.883	0.86	<0.20	304,000	<0.0020	<0.20	3.79	0.181	6.6
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	16-Sep-13	D	11.8	0.044	1.10	21.6	<0.010	205	0.046	119,000	<1.0	1.54	0.86	1,510	<0.10	17.1	139,000	3,660	0.77	1.07	<0.40	433,000	0.0056	0.88	4.46	0.33	11.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	9-Dec-13	D	<2.0	0.051	0.34	16.5	<0.010	287	0.050	117,000	<1.0	1.10	0.72	<30	0.14	17.3	157,000	3,260	0.94	0.70	<0.40	725,000	0.0041	<0.40	5.19	0.15	8.1
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-14	D	<5.0	<0.50	<2.0	10.4	<0.50	320	<0.050	78,700	<0.50	0.668	0.68	49	<0.30	<20	124,000	2,220	<2.0	0.51	<2.0	719,000	<0.050	<5.0	4.30	<0.50	4.8
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Jun-14	D	1.2	0.033	0.628	7.16	<0.0050	196	0.0197	60,900	<0.50	0.496	1.01	<30	<0.050	10.8	70,900	1,670	1.07	0.66	<0.20	324,000	0.0028	<0.20	4.76	0.347	5.9
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	11-Sep-14	D	<5.0	<0.50	<2.0	19.0	<0.50	1,070	0.113	157,000	<0.50	0.632	0.84	24	<0.30	41	302,000	2,500	<2.0	1.17	<2.0	2,040,000	<0.050	<5.0	3.87	<0.50	6.7
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	2-Dec-14	D	<1.0	0.044	0.495	9.61	<0.0050	230	0.0533	112,000	<0.50	0.419	0.55	33	<0.050	14.3	126,000	3,180	0.753	0.69	<0.20	504,000	0.0035	<0.20	4.93	0.220	10.1
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	10-Mar-15	D	<5.0	<0.50	<2.0	6.2	<0.50	150	<0.050	95,400	<0.50	0.469	0.64	141	<0.30	<20	100,000	3,440	<2.0	0.52	<2.0	335,000	<0.050	<5.0	5.25	<0.50	7.9
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Jun-15	D	<1.0	0.046	0.774	8.05	<0.0050	171	0.0286	87,700	<0.50	0.540	0.58	227	0.102	10.9	83,200	3,620	0.901	0.40	<0.20	334,000	<0.0020	<0.20	4.81	0.307	5.1
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	8-Sep-15	D	1.4	0.06	1.02	12.7	<0.0050	187	0.0775	123,000	<0.50	0.903	0.90	504	0.086	11.5	116,000	5,300	0.987	0.78	<0.20	451,000	0.0022	<0.20	4.85	0.708	14.3
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	7-Dec-15	D	<2.0	0.082	0.36	19.3	<0.010	209	0.224	192,000	<1.0	1.30	0.56	31	<0.10	11.2	189,000	8,140	0.87	0.87	0.44	694,000	0.0102	<0.40	7.31	0.14	19.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	29-Feb-16	D	<1.0	0.053	0.317	12.2	<0.0050	129	0.0559	136,000	<0.50	1.09	0.69	103	<0.050	11.7	134,000	6,130	0.786	0.92	<0.20	480,000	0.0024	<0.20	4.89	0.091	12.3
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	17-May-16	D	<1.0	0.121	0.577	12.3	<0.0050	159	0.0458	126,000	<0.50	1.04	0.66	173	<0.050	11.1	119,000	6,180	0.796	0.65	<0.20	454,000	0.0027	<0.20	5.82	0.189	17.4
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	15-Aug-16	D	3.1	0.138	0.99	17.1	<0.010	197	0.035	179,000	<1.0	1.57	0.46	1,220	<0.10	15.0	164,000	8,090	0.94	0.57	<0.40	582,000	0.0080	<0.40	7.53	0.24	9.0
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	21-Nov-16	D	4.9	0.251	0.38	16.5	<0.010	158	0.115	178,000	<1.0	1.61	1.05	215	<0.10	14.0	152,000	8,180	0.92	0.74	<0.40	620,000	0.0072	<0.40	8.63	0.24	15.8
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	14-Mar-17	D	<1.0	0.051	0.282	12.2	<0.0050	139	0.0529	104,000	<0.50	0.724	0.60	<30	0.074	9.60	87,900	4,300	0.785	0.60	<0.20	413,000	0.0035	<0.20	7.02	0.311	12.6
P6-12D	Porewater	P6-12	DS	EB	1.1-1.3	1.1	1.3	Beach sand	---	5-Jun-17	D	<5.0	<0.50	<2.0	6.5	<0.50	160	0.088	85,200	<0.50	0.491	1.13	<10	<0.30	<20	74,000	3,750	<2.0	<0.50	<2.0	373,000	0.098	<5.0	6.38	<0.50	9.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	D	21.9	0.167	3.70	61.0	<0.010	259	0.013	105,000	<1.0	1.12	0.47 J	11,400	<0.10	26.6	60,100	4,020	0.63	1.62	<0.40	407,000	<0.0040	0.88	0.755	2.32	7.6
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	D	18.8	<0.50	<9.0	489	<0.50	1,450	<0.050	501,000	<0.50	4.38	<0.50	30,000	<0.30	40	627,000	12,200	<2.0	2.10	<2.0	4,560,000	<0.050	<5.0	1.42	3.31	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	28.1	0.215	2.57	16.6	0.0171	203	<0.0050	66,800	<0.50	0.147	0.24	8,130	<0.050	12.9	43,800	1,870	0.109	0.68	0.43	217,000	<0.0020	0.95	0.0926	2.00	2.2
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	---													Well Not Sampled												
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	27.9	0.094	0.898	10.6	0.0123	52.6	<0.0050	79,200	<0.50	0.060	<0.20	13,900	<0.050	7.55	20,100	4,350	<0.050	0.39	0.22	64,800	<0.0020	0.78	0.0264	2.22	1.6
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	D	24.9	0.131	1.37	38.0	0.017	186	<0.010	117,000	<1.0	<0.10	<0.40	10,500	<0.10	12.0	67,100	5,100	<0.10	0.50	0.42	408,000	<0.0040	1.08	0.0291	3.93	2.5
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	T	34.6	0.188	1.56	60.2	0.022	248	0.071	161,000	<1.0	<0.10	<1.0	16,600	0.22	15.6	87,800	7,650	0.20	0.49	<0.40	569,000	<0.0040	1.77	0.0414	4.54	<6.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	D	27.2	<0.50	<7.0	443	<0.50	2,340	<0.050	475,000	<0.50	0.224	5.77	340	<0.30	46	646,000	5,770	<2.0	0.57	<2.0	5,620,000	<0.050	<5.0	0.508	7.96	4.6
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	T	36.1	0.61	<8.0	461	<0.50	2,380	0.291	503,000	0.61	0.187	0.85	568	0.30	48	663,000	5,840	<2.0	0.63 J+	<2.0	5,760,000	<0.050	<5.0	0.554	8.70	<5.0 U
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Dec-13	D	29.2	0.083	1.16	49.4	0.015	316	0.015	109,000	<1.0	<0.10	<0.40	511	<0.10	16.8	82,000	2,960	<0.10	<0.40	0.96	616,000	<0.0040	1.50	0.0749	6.07	<2.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Dec-13	T	42.9	0.138 J+	1.66	67.0	0.019	412	0.078	125,000	<1.0	<0.10	<1.0	989	0.22	19.9	96,600	3,710	0.15	0.48	<0.40	709,000	<0.0040	2.34	0.0975	7.19	<6.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	D	31.4	0.113	0.842	16.3	0.0134	188	0.0129	52,300	<0.50	0.092	0.35	2,600	<0.050	9.74	36,300	1,390	<0.050	0.28	0.20	239,000	<0.0020	1.02	0.0515	2.49	11.9
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Mar-14	T	42.4	0.131	0.863	17.7	0.0159	200	0.106	49,000	<0.50	<0.050	<0.50	2,750	0.277	10.3	34,000	1,340	0.102	<0.20	0.27	242,000	<0.0020	1.61	0.0543	3.07	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	13-Jun-14	D	21.9	0.059	0.701	40.7	0.0187	157	0.0060	136,000	<0.50	0.053	0.23	6,710	<0.050	15.6	67,400	5,640	<0.050	0.37	0.21	378,000	<0.0020	0.75	0.0383	2.59	2.5
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	13-Jun-14	T	28.1	0.103	0.677	32.6	0.0188	177	0.0974	112,000	0.53	0.055	<0.50	6,950	0.124	16.3	52,200	4,300	0.094	0.25	0.23	282,000	<0.0020	1.12	0.0318	2.78	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	16.1	<0.50	7.3	717	<0.50	2,250	<0.050	626,000	<0.50	0.150 J	<0.50	80.0	<0.30	56	800,000	8,500	<2.0	<0.50	<2.0	6,250,000	<0.050	<5.0	0.516	4.29	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	T	19.9	<0.50	6.7	696	<0.50	2,180	0.084 J	621,000	<0.50	0.138	<0.50 UJ	257	<0.30 UJ	54	768,000	8,530	<2.0	<0.50	<2.0	6,150,000	<0.050	<5.0	0.470	4.37	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	20.5	0.056	0.83	37.9	0.017	333	<0.010	83,500	<1.0	<0.10	<0.40	1,180	<0.10	14.5	68,700	2,110	<0.10	0.54 J	0.61	560,000	<0.0040	1.02	0.0378	3.95	<2.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	30.6	0.095 J+	0.77	37.4	0.016	339	0.149	76,900	<1.0	<0.10	<1.0	1,060	0.17	14.5	62,200	1,930	0.12	0.50	<0.40	532,000	<0.0040	1.59	0.0408	3.69	<6.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	D	13.8	0.065	0.802	41.8	0.0134	260	0.0225	97,200	<0.50	<0.050	<0.20	560	<0.050	8.83	77,200	1,920	<0.050	<0.20	1.23	491,000	<0.0020	0.57	0.0343	1.83	2.0
DUP-5 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	D	15.8	0.068	0.807	42.3	0.0132	261	0.0232	98,000	<0.50	<0.050	<0.20	570	<0.050	8.67	77,500	1,950	<0.050	0.24	1.02	500,000	<0.0020	0.61	0.0339	1.84	2.70
QA/QC RPD										Duplicates	D	14%	5%	1%	1%	---	0%	---	1%	---	---	---	2%	---	2%	0%	2%	---	---	19%	2%	---	---	1%	1%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	T	36.6	0.139	0.983	46.6	0.0134	247	0.286	92,800	<0.50	0.077	<0.50	1,850	0.123	8.75	74,600	1,910	0.175	0.34	0.23	468,000	<0.0050	1.61	0.0362	2.35	3.10
DUP-5 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-15	T	41.5	0.153	0.939	46.9	0.0133	252	0.276	93,600	<0.50	0.077	<0.50	1,900	0.131	8.75	73,300	1,860	0.177	0.3	0.3	470,000	<0.0050	1.75	0.0365	2.36	3.90
QA/QC RPD										Duplicates	T	13%	---	5%	1%	---	2%	4%	1%	---	---	---	3%	---	0%	2%	3%	---	---	---	0%	---	8%	1%	0%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-Jun-15	D	9.4	<0.50	3.5	573	<0.50	1,510	<0.050	615,000	<0.50	0.082	<0.50	313	<0.30	28	670,000	12,200	<2.0	1.00	<2.0	4,960,000	<0.050	<5.0	0.148	2.77	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-Jun-15	T	13.0	<0.50	4.0	591	<0.50	1,550	0.073	647,000	<0.50	0.097	<0.50	674	<0.30	29	689,000	12,300	<2.0	1.36	<2.0	5,250,000	<0.050	<5.0	0.159	3.08	<3.0
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	14.8	<0.50	5.3	441	<0.50	2,230	<0.050	464,000	<0.50	0.098	<0.50	18	<0.30	61	697,000	4,820	<2.0	<0.50	<2.0	5,320,000	<0.050	<5.0	0.460	3.60	<3.0
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	13.4	<0.50	4.9	420	<0.50	2,210	<0.050	468,000	<0.50	0.075	<0.50	16	<0.30	58	695,000	4,770	<2.0	<0.50	<2.0	5,420,000	<0.050	<5.0	0.403	3.48	<3.0
QA/QC RPD										Duplicates	D	10%	---	8%	5%	---	1%	---	1%	---	---	---	---	---	5%	0%	1%	---	---	---	2%	---	---	13%	3%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	23.8	0.70	6.7	413	<0.50	2,140	0.206	437,000	<0.50	0.128	<0.50	318	<0.30	58	637,000	4,790	<2.0	0.55	<2.0	5,010,000	<0.050	<5.0	0.447	3.51	<3.0
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	32.3	0.78	6.6	433	<0.50	2,260	0.225	462,000	<0.50	0.106	<0.50	336	<0.30	60.0	665,000	4,860	<2.0	<0.50	<2.0	5,370,000	<0.050	<5.0	0.449	3.69	<3.0
QA/QC RPD										Duplicates	T	---	11%	2%	5%	---	5%	9%	6%	---	---	---	6%	---	3%	4%	1%	---	---	---	7%	---	---	0%	5%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	12.6	<0.50	<2.0	70.5	<0.50	860	<0.050	155,000	<0.50	<0.050	<0.50	86	<0.30	27	196,000	2,510	<2.0	<0.50	<2.0	1,740,000	<0.050	<5.0	0.084	3.07	<3.0
DUP-6 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	12.5	<0.50	<2.0	61.6	<0.50	830	<0.050	162,000	<0.50	<0.050	<0.50	91	<0.30	28	186,000	2,560	<2.0	<0.50	<2.0	1,730,000	<0.050	<5.0	0.083	3.21	<3.0
QA/QC RPD										Duplicates	D	1%	---	---	13%	---	4%	---	4%	---	---	---	6%	---	4%	5%	2%	---	---	---	1%	---	---	1%	4%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	17.7	<0.50	<2.0	49.0	<0.50	780	<0.050	130,000	<0.50	0.050	<0.50	90.0	<0.30	23	163,000	1,900	<2.0	<0.50	<2.0	1,570,000	<0.050	<5.0	0.081	3.41	<3.0
DUP-6 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	17.2	<0.50	<2.0	48.5	<0.50	820	0.063	143,000	<0.50	<0.050	<0.50	95	<0.30	23	162,000	1,990	<2.0	<0.50	<2.0	1,670,000	<0.050	<5.0	0.073	3.38	<3.0
QA/QC RPD										Duplicates	T	---	---	---	1%	---	5%	---	10%	---	---	---	5%	---	0%	1%	5%	---	---	---	6%	---	---	10%	1%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	21.2	<0.50	<2.0	14.9	<0.50	1,650	<0.050	146,000	<0.50	<0.050	<0.50	46	<0.30	63	424,000	172	<2.0	<0.50	12.1	3,460,000	<0.050	<5.0	0.770	2.17	4.10
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	62.8	<0.50	2.3	12.5	<0.50	1,510	0.080	134,000	<0.50	0.104	<0.50	969	<0.30	62	397,000	170	<2.0	0.94	<2.0	3,260,000	<0.050	<5.0	0.752	3.48	4.60
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	D	16.4	<0.50	<2.0	14.2	<0.50	510	<0.050	213,000	<0.50	<0.050	<0.50	35	<0.30	32	185,000	3,170	<2.0	<0.50	4.9	1,290,000	<0.050	<5.0	0.294	2.55	<3.0
DUP-3 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	D	17.7	<0.50	<2.0	14.1	<0.50	500	<0.050	211,000	<0.50	<0.050	<0.50	37	<0.30	34	185,000	3,360	<2.0	<0.50	2.9	1,280,000	<0.050	<5.0	0.301	2.67	<3.0
QA/QC RPD										Duplicates	D	8%	---	---	1%	---	2%	---	1%	---	---	---	---	---	6%	0%	6%	---	---	51%	1%	---	---	2%	5%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	T	38.8	<0.50	<2.0	15.9	<0.50	510	0.149	214,000	<0.50	0.056	<0.50	128	<0.30	31	186,000	3,170	<2.0	<0.50	<2.0	1,300,000	<0.050	<5.0	0.295	2.79	<3.0
DUP-3 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	18-May-16	T	35.7	<0.50	<2.0	16.9	<0.50	500	0.127	222,000	<0.50	0.054	<0.50	130	<0.30	34	192,000	3,430	<2.0	<0.50	<2.0	1,420,000	<0.050	<5.0	0.286	2.95	<3.0
QA/QC RPD										Duplicates	T	8%	---	---	6%	---	2%	16%	4%	---	---	---	2%	---	9%	3%	8%	---	---	---	9%	---	---	3%	6%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	14.1	<0.50	<2.0	206	<0.50	1,800	0.067	406,000	<0.50	0.076	<0.50	14	<0.30	63	674,000	2,370	<2.0	0.82	6.3	4,810,000	<0.050	<5.0	0.302	2.06	<3.0
DUP-2 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	13.4	<0.50	<2.0	227	<0.50	1,780	0.079	412,000	<0.50	0.052	<0.50	11	<0.30	61	664,000	2,330	<2.0	0.86	5.1	4,900,000	<0.050	<5.0	0.311	2.11	<3.0
QA/QC RPD										Duplicates	D	5%	---	---	10%	---	1%	16%	1%	---	---	---	---	---	3%	1%	2%	---	---	21%	2%	---	---	3%	2%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	37.9	<0.50	<2.0	220	<0.50	1,720	0.108	418,000	<0.50	0.099	<0.50	129	<0.30	59	680,000	2,430	<2.0	1.58	<2.0	4,840,000	<0.050	<5.0	0.363	2.74	3.50
DUP-2 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	40.3	<0.50	<2.0	229	<0.50	1,780	0.100	423,000	<0.50	0.106	<0.50	176	<0.30	64	686,000	2,510	<2.0	1.74	<2.0	4,960,000	<0.050	<5.0	0.378	2.88	4.0
QA/QC RPD										Duplicates	T	6%	---	---	4%	---	3%	8%	1%	---	---	---	31%	---	8%	1%	3%	---	10%	---	2%	---	---	4%	5%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	D	16.1	<0.50	<2.0	37.6	<0.50	600	<0.050	127,000	<0.50	<0.050	<0.50	48	<0.30	28	153,000	961	<2.0	<0.50	<2.0	1,220,000	<0.050	<5.0	0.065	2.19	<3.0
DUP-8 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	D	15.9	<0.50	<2.0	41.5	<0.50	590	<0.050	129,000	<0.50	<0.050	<0.50	48	<0.30	28	152,000	998	<2.0	<0.50	<2.0	1,240,000	<0.050	<5.0	0.062	2.20	<3.0
QA/QC RPD										Duplicates	D	1%	---	---	10%	---	2%	---	2%	---	---	---	---	---	0%	1%	4%	---	---	---	2%	---	---	5%	0%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	24-Nov-16	T	45.0	<0.50	<2.0	34.0	<0.50	560	<0.050	121,000	<0.50	0.064	<0.50	134	<0.30	26	142,000	892	<2.0	<0.50	<2.0	1,180,000	<0.050	<5.0	0.068	2.38	3.40
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	30.9	<0.50	<2.0	84.8	<0.50	750	<0.050	138,000	<0.50	<0.050	<0.50	124	<0.30	29	231,000	1,900	<2.0	<0.50	<2.0	1,680,000	<0.050	<5.0	0.067	3.12	<3.0
DUP-6 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	24.3	<0.50	<2.0	67.3	<0.50	750	<0.050	137,000	<0.50	<0.050	<0.50	102	<0.30	24	229,000	1,510	<2.0	<0.50	<2.0	1,700,000	<0.050	<5.0	<0.050	2.49	<3.0
QA/QC RPD										Duplicates	D	24%	---	---	23%	---	0%	---	1%	---	---	---	19%	---	19%	1%	23%	---	---	---	1%	---	---	---	22%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	987	<0.50	<2.0	49.9	<0.50	590	0.432	99,100	1.89	0.696	3.14	5,480	2.65	21	156,000	1,190	<2.0	1.58	<2.0	1,160,000	<0.050	27.8	0.259	6.45	12.2
DUP-6 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	464	<0.50	<2.0	54.0	<0.50	650	0.336	104,000	0.68	0.422	2.20	3,520	1.65	21	165,000	1,210	<2.0	1.08	<2.0	1,230,000	<0.050	14.8	0.212	5.23	11.8
QA/QC RPD										Duplicates	T	72%	---	---	8%	---	10%	25%	5%	---	49%	---	44%	47%	0%	6%	2%	---	38%	---	6%	---	61%	20%	21%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	15.4	<0.50	<2.0	113	<0.50	700	<0.050	319,000	<0.50	<0.050	<0.50	2,390	<0.30	34	276,000	6,350	<2.0	<0.50	8.8	1,890,000	<0.050	<5.0	<0.050	1.21	<3.0
DUP-4 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	15.0	<0.50	<2.0	118	<0.50	740	<0.050	313,000	<0.50	<0.050	<0.50	2,330	<0.30	34	279,000	6,150	<2.0	<0.50	6.9	1,850,000	<0.050	<5.0	<0.050	1.18	<3.0
QA/QC RPD										Duplicates	D	3%	---	---	4%	---	6%	---	2%	---	---	---	3%	---	0%	1%	3%	---	---	24%	2%	---	---	---	3%	---
P6.25-3	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	191	<0.50	<2.0	152	<0.50	820	0.082	399,000	<0.50	0.127	0.93	4,230	0.43	39	351,000	7,060	<2.0	<0.50	<2.0	2,330,000	<0.050	5.7	0.063	1.98	5.0
DUP-4 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	63.6	<0.50	<2.0	135	<0.50	760	0.054	381,000	<0.50	0.075	0.65	3,650	<0.30	37	334,000	6,820	<2.0	<0.50	<2.0	2,220,000	<0.050	<5.0	<0.050	1.63	<3.0
QA/QC RPD										Duplicates	T	100%	---	---	12%	---	8%	41%	5%	---	---	---	15%	---	5%	5%	3%	---	---	---	5%	---	---	---	19%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jun-12	D	24.0	<0.50	4.0	163	<0.50	420	<0.050	159,000	<0.50	10.2	<0.50	19,100	<0.30	26	145,000	5,600	<2.0	8.21	<2.0	1,030,000	<0.050	<5.0	0.922	2.68	8.3
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-12	D	18.6	<0.50	<8.0	450	<0.50	2,200	<0.050	511,000	<0.50	3.07	<0.50	17,800	<0.30	67	829,000	6,830	<2.0	4.40	<2.0	6,450,000	<0.050	<5.0	1.99	3.32	3.3
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	37.1	0.226	3.04	15.7	0.018	508	<0.010	49,200	<1.0	<0.10	<0.40	795	<0.10	12.9	60,000	1,040	0.12	0.48	0.74	668,000	<0.0040	2.17	0.110	4.89	<2.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	---													Well Not Sampled												
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	27.6	0.062	0.990	8.39	0.0129	110	0.0715	68,600	<0.50	0.135	0.39	4,480	<0.050	13.9	32,700	3,110	0.104	0.50	0.22	112,000	<0.0020	0.97	0.0620	2.95	3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	D	23.5	0.093	1.50	10.1	0.0149	240	<0.0050	67,000	<0.50	0.054 J	<0.20	2,680	<0.050	12.7	36,200	2,290	0.105	0.41	0.35	308,000	<0.0020	1.67	0.0201	4.61	1.8 J
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	T	51.2	0.131 J	1.62	22.8 J	0.0193	337 J	0.0129 J	95,400 J	<0.50	0.088	<0.50	4,500 J	0.154	15.0	58,000 J	3,150 J	0.226	0.35	0.28 J	525,000 J	<0.0020	3.23	0.0330	5.61	4.7 J
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	D	22.3	<0.50	9.3	479	<0.50	2,480	<0.050	577,000	<0.50	0.209	<0.50	112	<0.30	60	801,000	5,050	<2.0	0.80	2.2	7,100,000	<0.050	<5.0	0.514	6.75	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Sep-13	T	32.0	0.78	12.4	490	<0.50	2,510	<0.050	581,000	<0.50	0.161	0.59	779	<0.30	61	800,000	5,020	<2.0	0.66 J+	<2.0	6,470,000	<0.050	<5.0	0.508	6.82	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	D	12.3	<0.50	<2.0	64.9	<0.50	620	<0.050	175,000	<0.50	0.099 J	<0.50	116	<0.30	21	159,000	2,260	<2.0	<0.50	<2.0	1,220,000	<0.050	<5.0	0.184	3.69	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	T	39.7	<0.50	3.2	109	<0.50	790	<0.050	251,000	<0.50	0.121	<0.60 U	802	<0.30	27	245,000	3,530	<2.0 UJ	0.97 J	<2.0	1,750,000	<0.050	<5.0	0.289	4.10	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	D	26.6	<0.50	<2.0	43.4	<0.50	750	<0.050	110,000	<0.50	0.114	<0.50	75	<0.30	<20	148,000	1,950	<2.0	<0.50	<2.0	1,450,000	<0.050	<5.0	0.099	5.40	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	T	38.2	<0.50	<2.0	34.0	<0.50	690	<0.050	88,400	<0.50	0.078	<0.50	171	<0.30	<20	126,000	1,510	<2.0	0.54	<2.0	1,220,000	<0.050	<5.0	0.116	5.69	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	D	30.3	0.030	0.491	12.3	0.0152	242	<0.0050	41,400	<0.50	0.063	<0.20	298	<0.050	11.5	34,700	1,150	<0.050	0.30 J	<0.20	321,000	<0.0020	1.78	0.0211	5.84	1.7 J
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	T	34.7 J	0.075	0.452	12.1	0.0188	289	0.0069	40,800	0.57	0.061	<0.50	409	0.126	13.9	33,100	1,040	0.083	0.23	<0.20	300,000	<0.0020	2.49 J	0.0239	5.66	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	13.1	0.54	4.2	476	<0.50	2,300	<0.050	572,000	<0.50	0.134 J	<0.50	36	<0.30	58	815,000	7,190	<2.0	<0.50	<2.0	6,290,000	<0.050	<5.0	0.440	4.38	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	T	16.7	<0.50	4.3	507	<0.50	2,330	<0.050	560,000	<0.50	0.121 J	<0.50	243	<0.30	58	790,000	7,470	<2.0	<0.50	<2.0	5,930,000	<0.050	<5.0	0.489	4.24	6.0 J
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	16.2	<0.50	<2.0	19.3	<0.50	1,040	<0.050	126,000	<0.50	<0.050	<0.50	131	<0.30	36	255,000	1,170 J	<2.0	0.57 J	<4.0	2,140,000	<0.050	<5.0	0.326	2.23	<3.0
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	85.7	<0.50	<2.0	18.7	<0.50	990	<0.050 UJ	122,000	<0.50	0.060	0.55	280	<0.30 UJ	36	233,000	1,190 J	<2.0	1.20 J	<2.0	2,030,000	<0.050	<5.0	0.343	2.80	7.7 J
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	D	12.0	0.064	0.43	6.94	<0.010	392	<0.010	78,300	<1.0	<0.10	<0.40	318	<0.10	18.8	99,700	1,400	<0.10	0.43	<0.40	775,000	<0.0040	0.49	0.101	1.96	7.6
DUP-8 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	D	11.3	0.06	0.44	6.55	<0.010	390	<0.010	76,900	<1.0	<0.10	<0.40	313	<0.10	18.6	99,100	1,350	<0.10	<0.40	<0.40	760,000	<0.0040	0.5	0.098	1.9	2.3
QA/QC RPD										Duplicates	D	6%	6%	2%	6%	---	1%	---	2%	---	---	---	2%	---	1%	1%	4%	---	---	---	2%	---	---	3%	3%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	T	91.4	<0.14	0.56	11.7	0.012	422	0.045	73,900	<1.0	<0.10	<1.0	1,660	0.19	19.6	97,000	1,390	0.32	<0.40	<0.40	722,000	<0.010	3.09	0.111	2.86	200
DUP-8 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	T	90.5	<0.14	0.56	11.7	0.015	423	0.05	75,800	<1.0	<0.10	<1.0	1,680	0.39	19.6	98,700	1,420	0.31	<0.40	<0.40	743,000	<0.010	3.34	0.114	2.85	204
QA/QC RPD										Duplicates	T	1%	---	0%	0%	---	0%	11%	3%	---	---	---	1%	---	0%	2%	2%	3%	---	---	3%	---	8%	3%	0%	2%
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	D	7.1	<0.50	<2.0	180	<0.50	2,660	<0.050	465,000	<0.50	<0.050	<0.50	27	<0.30	68	819,000	2,620	<2.0	<0.50	<2.0	6,890,000	<0.050	<5.0	0.827	1.22	<3.0
DUP-7 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	D	7.4	<0.50	<2.0	179	<0.50	2,730	<0.050	456,000	<0.50	<0.050	<0.50	28	<0.30	67	815,000	2,710	<2.0	<0.50	<2.0	6,760,000	<0.050	<5.0	0.813	1.23	<3.0
QA/QC RPD										Duplicates	D	4%	---	---	1%	---	3%	---	2%	---	---	---	---	---	1%	0%	3%	---	---	---	2%	---	---	2%	1%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	T	25.2	<0.50	<2.0	179	<0.50	2,630	<0.050	465,000	<0.50	<0.050	<0.50	285	<0.30	69	826,000	2,640	<2.0	<0.50	<2.0	6,860,000	<0.050	<5.0	0.818	1.54	12.8
DUP-7 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	T	24.2	<0.50	<2.0	182	<0.50	2,660	<0.050	447,000	<0.50	<0.050	<0.50	299	<0.30	70.0	798,000	2,810	<2.0	<0.50	<2.0	6,470,000	<0.050	<5.0	0.816	1.58	13.9
QA/QC RPD										Duplicates	T	---	---	---	2%	---	1%	---	4%	---	---	---	5%	---	1%	3%	6%	---	---	---	6%	---	---	0%	3%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	11.7	0.70	10.7	223	<0.50	2,430	<0.050	362,000	<0.50	0.057	<0.50	113	<0.30	53	611,000	1,800	<2.0	<0.50	<2.0	5,140,000	<0.050	<5.0	1.66	2.29	<3.0
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	D	9.5	0.71	10.5	221	<0.50	2,420	<0.050	375,000	<0.50	0.067	<0.50	<10	<0.30	51	619,000	1,840	<2.0	<0.50	<2.0	5,290,000	<0.050	<5.0	1.66	2.25	<3.0
QA/QC RPD										Duplicates	D	21%	1%	2%	1%	---	0%	---	4%	---	---	---	---	---	4%	1%	2%	---	---	---	3%	---	---	0%	2%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	51.9	1.03	13.5	220	<0.50	2,310	<0.050	346,000	0.51	0.100	0.59	913	<0.30	47	567,000	1,660	<2.0	<0.50	<2.0	4,800,000	<0.050	<5.0	1.49	2.51	13.7
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Sep-15	T	49.2	1.12	12.5	220	<0.50	2,350	<0.050	340,000	0.56	0.075	0.57	899	<0.30	48	559,000	1,790	<2.0	0.56	<2.0	4,810,000	<0.050	<5.0	1.51	2.68	12.9
QA/QC RPD										Duplicates	T	5%	8%	8%	0%	---	2%	---	2%	---	---	---	2%	---	2%	1%	8%	---	---	---	0%	---	---	1%	7%	---

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	9.4	<0.50	<2.0	57.4	<0.50	830	<0.050	168,000	<0.50	<0.050	<0.50	49	<0.30	24	192,000	2,980	<2.0	<0.50	<2.0	1,590,000	<0.050	<5.0	0.158	2.64	<3.0
DUP-5 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	8.8	<0.50	<2.0	55.0	<0.50	810	<0.050	176,000	<0.50	<0.050	<0.50	46	<0.30	24	184,000	2,710	<2.0	<0.50	<3.0	1,650,000	<0.050	<5.0	0.161	2.52	<3.0
QA/QC RPD										Duplicates	D	7%	---	---	4%	---	2%	---	5%	---	---	---	---	---	0%	4%	9%	---	---	---	4%	---	---	2%	5%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	47.0	<0.50	<2.0	64.9	<0.50	860	<0.050	183,000	<0.50	0.061	<0.50	649	<0.30	26	215,000	3,240	<2.0	<0.50	<2.0	1,750,000	<0.050	<5.0	0.169	3.00	8.5
DUP-5 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	47.6	<0.50	<2.0	66.5	<0.50	850	<0.050	194,000	<0.50	0.076	<0.50	572	<0.30	25	209,000	3,090	<2.0	<0.50	<2.0	1,800,000	<0.050	7.3	0.174	3.21	8.90
QA/QC RPD										Duplicates	T	1%	---	---	2%	---	1%	---	6%	---	---	---	13%	---	4%	3%	5%	---	---	---	3%	---	---	3%	7%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	21.3	0.038	0.368	11.4	0.0090	230	0.0072	39,900	<0.50	<0.050	<0.20	49	<0.050	7.62	44,500	671	<0.050	<0.20	0.23	328,000	<0.0020	1.15	0.0257	3.35	1.8
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	70.3	0.083	0.495	11.1	0.0101	226	0.0302	37,000	<0.50	0.061	<0.50	579	0.343	7.48	42,500	625	0.286	0.23	<0.20	314,000	<0.0050	3.23	0.0372	3.87	11.8
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	D	20.8	0.85	<2.0	36.1	<0.50	620	<0.050	301,000	<0.50	<0.050	<0.50	178	<0.30	42	271,000	7,390	<2.0	<0.50	3.2	1,810,000	<0.050	<5.0	0.234	2.82	<3.0
DUP-4 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	D	21.9	0.89	<2.0	36.6	<0.50	620	<0.050	302,000	<0.50	<0.050	0.68	192	<0.30	41	272,000	7,270	<2.0	0.51	<2.0	1,820,000	<0.050	<5.0	0.234	2.69	<3.0
QA/QC RPD										Duplicates	D	5%	5%	---	1%	---	0%	---	0%	---	---	---	8%	---	2%	0%	2%	---	---	---	1%	---	---	0%	5%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	T	58.7	1.02	<2.0	41.2	<0.50	520	<0.050	296,000	<0.50	0.064	<0.50	1,770	<0.30	40.0	241,000	7,810	<2.0	<0.50	<2.0	1,580,000	<0.050	<5.0	0.228	3.71	4.4
DUP-4 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-May-16	T	53.6	1.05	<2.0	35.8	<0.50	540	<0.050	291,000	<0.50	0.055	<0.50	1,540	<0.30	39	240,000	7,640	<2.0	<0.50	<2.0	1,590,000	<0.050	<5.0	0.223	3.54	6.8
QA/QC RPD										Duplicates	T	9%	3%	---	14%	---	4%	---	2%	---	---	---	14%	---	3%	0%	2%	---	---	---	1%	---	---	2%	5%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	12.9	<0.50	<2.0	191	<0.50	1,580	0.080	484,000	<0.50	0.065	<0.50	35	<0.30	52	621,000	6,410	<2.0	<0.50	5.5	4,040,000	<0.050	<5.0	0.280	1.96	<3.0
DUP-3 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	14.3	<0.50	<2.0	200	<0.50	1,620	0.077	500,000	<0.50	<0.050	<0.50	41	<0.30	53	616,000	6,450	<2.0	<0.50	3.7	4,140,000	<0.050	<5.0	0.293	1.89	<3.0
QA/QC RPD										Duplicates	D	10%	---	---	5%	---	3%	4%	3%	---	---	---	---	---	2%	1%	1%	---	---	39%	2%	---	---	5%	4%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	41.4	<0.50	<2.0	203	<0.50	1,600	0.074	491,000	<0.50	0.069	<0.50	447	<0.30	51	612,000	6,330	<2.0	0.58	<2.0	3,950,000	<0.050	<5.0	0.301	2.33	3.3
DUP-3 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	39.8	<0.50	<2.0	206	<0.50	1,600	0.066	486,000	<0.50	0.085	<0.50	397	<0.30	48	603,000	5,920	<2.0	<0.50	<2.0	4,010,000	<0.050	<5.0	0.315	2.38	3.4
QA/QC RPD										Duplicates	T	4%	---	---	1%	---	0%	11%	1%	---	---	---	12%	---	6%	1%	7%	---	---	---	2%	---	---	5%	2%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	D	16.3	<0.50	<2.0	29.7	<0.50	490	<0.050	78,200	<0.50	<0.050	<0.50	30	<0.30	<20	74,700	753	<2.0	<0.50	<2.0	821,000	<0.050	<5.0	0.105	3.54	<3.0
DUP-7 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	D	16.1	<0.50	<2.0	33.8	<0.50	510	<0.050	84,100	<0.50	0.055	<0.50	30	<0.30	<20	82,900	775	<2.0	<0.50	<2.0	900,000	<0.050	<5.0	0.110	3.56	<3.0
QA/QC RPD										Duplicates	D	1%	---	---	13%	---	4%	---	7%	---	---	---	---	---	---	10%	3%	---	---	---	9%	---	---	5%	1%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	T	175	<0.50	<2.0	54.9	<0.50	600	0.094	113,000	<0.50	0.119	0.96	880	0.36	<20	126,000	976	<2.0	0.57	<2.0	1,180,000	<0.050	8.3	0.133	4.66	11.9
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	16.2	0.049	0.63	31.7	0.012	589	<0.010	88,900	<1.0	<0.10	<0.40	678	<0.10	18.7	123,000	1,520	0.10	<0.40	1.39	898,000	<0.0040	0.54	0.0918	2.36	<2.0
DUP-7 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	D	14.2	0.044	0.58	33.0	<0.010	503	<0.010	92,500	<1.0	<0.10	<0.40	634	<0.10	16.0	126,000	1,330	<0.10	<0.40	0.90	925,000	<0.0040	0.53	0.0793	2.25	<2.0
QA/QC RPD										Duplicates	D	13%	---	8%	4%	---	16%	---	4%	---	---	---	7%	---	16%	2%	13%	---	---	---	3%	---	---	15%	5%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	221	0.094	0.59	27.9	0.019	498	0.237	75,700	<1.0	0.15	<1.0	3,590	0.46	16.5	101,000	1,330	0.41	0.42	<0.40	824,000	<0.010	8.09	0.104	3.66	16.6
DUP-7 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	16-Mar-17	T	291	0.097	0.70	24.8	0.020	421	0.234	77,000	<1.0	0.17	<1.0	4,400	0.94	14.1	103,000	1,050	0.48	0.48	<0.40	832,000	<0.010	10.8	0.111	3.16	13.9
QA/QC RPD										Duplicates	T	27%	---	17%	12%	---	17%	1%	2%	---	---	---	20%	69%	16%	2%	24%	16%	---	---	1%	---	29%	7%	15%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	14.4	<0.020	0.26	57.7	<0.010	409	<0.010	228,000	<1.0	<0.10	<0.40	2,780	<0.10	32.7	126,000	6,670	<0.10	<0.40	3.65	839,000	<0.0040	0.63	0.0202	1.91	<2.0
DUP-3 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	14.9	<0.020	0.27	58.0	0.012	406	<0.010	221,000	<1.0	<0.10	<0.40	2,660	<0.10	33.0	123,000	6,380	<0.10	<0.40	3.18	817,000	<0.0040	0.71	0.0202	1.97	<2.0
QA/QC RPD										Duplicates	D	3%	---	4%	1%	---	1%	---	3%	---	---	---	4%	---	1%	2%	4%	---	---	14%	3%	---	---	0%	3%	---
P6.5-3	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	18.5	<0.060	0.34	74.7	<0.010	438	0.016	289,000	<1.0	<0.10	<1.0	4,860	<0.10	38.4	166,000	8,710	<0.10	<0.40	<0.40	914,000	<0.010	1.08	0.0247	1.87	<6.0
DUP-3 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	17.9	<0.060	0.31	75.3	<0.010	479	0.019	293,000	<1.0	<0.10	<1.0	5,020	<0.10	38.7	165,000	8,490	<0.10	<0.40	<0.40	930,000	<0.010	1.08	0.0237	1.87	<6.0
QA/QC RPD										Duplicates	T	---	---	9%	1%	---	9%	---	1%	---	---	---	3%	---	1%	1%	3%	---	---	---	2%	---	0%	4%	0%	---
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Jun-12	D	39.6	<0.50	4.8	102	<0.50	670	<0.050	161,000	<0.50	1.97	<0.50	5,540	<0.30	30	167,000	3,500	<2.0	2.68	<2.0	1,570,000	<0.050	<5.0	0.673	4.06	7.3
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-12	D	17.9	<0.50	<8.0	344	<0.50	2,760	<0.050	459,000	<0.50	2.14	<0.50	16,700	<0.30	92	894,000	4,660	<2.0	2.16	<2.0	7,380,000	<0.050	<5.0	2.40	3.1	<3.0
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	50.0	0.174	1.75	16.9	0.0262	232	0.0096	70,000	<0.50	0.060	0.24	4,200	<0.050	12.2	50,100	2,690	0.051	0.33	0.22	349,000	<0.0020	1.82	0.0350	4.55	1.8
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	25-Feb-13	---													Well Not Sampled												
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	16.7	0.176	1.05	7.49	<0.010	402	0.113	63,500	<1.0	0.23	0.85	2,000	<0.10	23.4	95,700	1,250	1.30	0.62	<0.40	768,000	<0.0040	0.75	0.344	1.11	3.4
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	D	<5.0	<0.50	<4.0	25.2	<0.50	3,490	<0.050	235,000	<0.50	0.132	0.62	614	<0.30	127	808,000	212	7.3	0.97	<2.0	6,070,000	<0.050	<5.0	1.79	0.56	3.9
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Jun-13	T	3,760	<0.50	<4.0	41.7	0.51	3,060	0.076	219,000	0.54	0.288	1.55	2,210	6.57	106	749,000	272	5.9	1.46	<2.0	5,690,000	<0.050	20.4	2.48	1.73	11.9
P6.75-3	Porewater EAZ	P6.75-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	16-Sep-13	---													Well Destroyed												
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	6-Dec-11	D	13.5	<0.50	<2.0	15.5	<0.50	280	<0.050	65,700	<0.50	0.603	<0.50	1,960	<0.30	<20	59,800	2,130	<2.0	0.87	<2.0	332,000	<0.050	<5.0	0.339	0.7	5.3
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jan-12	D	16.3	<0.50	<2.0	16.9	<0.50	380	<0.050	65,300	<0.50	0.287	<0.50	421	<0.30	<20	40,600	1,790	<2.0	0.72	<2.0	432,000	<0.050	<5.0	0.277	0.54	10.7
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Feb-12	D	32.0	0.158	1.78	11.1	<0.025	330	<0.025	44,400	<2.5	<0.25	<2.5	1,270	<0.25	10.4	27,000	1,020	0.86	1.8	<1.0	300,000	<0.010	1.4	0.228	1.63	<15
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-12	D	8.5	<0.50	<2.0	96.2	<0.50	380	<0.050	309,000	<0.50	0.610	<0.50	12,900	<0.30	32	153,000	5,980	<2.0	0.76	<2.0	955,000	<0.050	<5.0	0.415	<0.50	13.1
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Apr-12	D	25.8	<0.50	4.1	147	<0.50	350	0.069	321,000	<0.50	0.598	<0.50	23,400	<0.30	26	200,000	8,280	<2.0	1.33	<2.0	1,050,000	<0.050	<5.0	0.681	3.74	3.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-May-12	D	22.8	0.192	2.01	66.7	<0.010	298	<0.010	221,000	<1.0	0.39	<1.0	11,400	<0.10	32.7	124,000	5,560	0.26	0.75	<0.40	684,000	<0.0040	1.27	0.534	2.42	11.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	5-Jun-12	D	29.7	<0.50	2.2	100	<0.50	920	<0.050	210,000	<0.50	0.246	0.51	9,640	<0.30	45	213,000	2,860	<2.0	0.78	<2.0	2,010,000	<0.050	<5.0	0.632	3.74	10.6
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	4-Jul-12	D	25.1	<0.50	<3.0	119	<0.50	1,060	<0.050	206,000	<0.50	0.155	<0.50	6,830	0.38	48	212,000	3,670	<2.0	1.25	<2.0	1,910,000	<0.050	<5.0	0.450	3.44	4.4
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	1-Aug-12	D	26.9	<0.50	<6.0	265	<0.50	1,580	<0.050	312,000	<0.50	0.076	<0.50	1,600	<0.30	54	461,000	3,070	<2.0	1.59	<2.0	4,440,000	<0.050	<5.0	0.988	5.75	5.1
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Sep-12	D	14.6	<0.50	<4.0	236	<0.50	2,330	<0.050	392,000	<0.50	0.364	1.21	3,830	<0.30	70	699,000	2,920	2.3	0.92	<2.0	5,730,000	<0.050	<5.0	2.50	4.53	5.4
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Oct-12	D	16.0	<0.50	<5.0	334	<0.50	1,950	0.055	441,000	<0.50	0.266	<0.50	27,600	<0.30	69	687,000	4,880	2.6	5.33	<2.0	5,660,000	<0.050	<5.0	4.77	4.79	12.8
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Nov-12	D	29.4	0.166	1.88	5.25	0.0083	178	0.0090	74,200	<0.50	0.332	0.34	3,720	0.097	17.5	30,000	3,530	0.139	2.36	0.37	147,000	<0.0020	2.27	0.0787	4.20	6.1
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-12	D	24.3	0.173	1.90	9.93	0.0102	337	<0.0050	62,500	<0.50	0.101	0.21	1,130	<0.050	14.9	43,400	1,190	0.050	1.15	0.51	347,000	<0.0020	2.32	0.0738	3.72	3.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	8-Jan-13	D	19.9	0.182	2.27	24.5	0.113	725	<0.010	66,200	<1.0	<0.10	<0.40	74	3.38	13.4	63,000	680	0.11	0.70	0.55	716,000	0.355	2.22	0.339	3.44	<2.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	25-Feb-13	---													Well Not Sampled												
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Mar-13	D	24.3	0.078	0.990	22.3	0.0071	190	0.0136	125,000	<0.50	<0.050	<0.20	603	<0.050	15.8	64,900	2,220	<0.050	0.50	0.32	316,000	<0.0020	1.95	0.0812	3.61	<1.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Jun-13	D	16.4	<0.50	<2.0	167	<0.50	770	<0.050	278,000	<0.50	0.090	<0.50	378	<0.30	37	275,000	3,580	<2.0	1.56	<2.0	1,820,000	<0.050	<5.0	0.482	3.89	3.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Jun-13	T	5,480	0.73	5.6	248	<0.50	890	0.328	296,000	5.64	3.83	16.0	18,100	7.52	46	293,000	3,810	3.1	7.84	<2.0	1,850,000	<0.050	180	1.40	22.3	95.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Sep-13	D	18.9	<0.50	<7.0	361	<0.50	3,080	<0.050	430,000	0.78	0.195	0.54	76	<0.30	84	770,000	1,960	<2.0	1.10	<2.0	7,050,000	<0.050	<5.0	0.794	4.12	<3.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Sep-13	T	798	0.69	<9.0	360	<0.50	3,050	<0.050	434,000	1.58	0.761	3.71	3,530	1.44	83	756,000	1,920	2.5	2.61 J+	<2.0	7,000,000	<0.050	35.7	0.928	6.83	<15 U
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-13	D	16.9	<0.50	<2.0	119	<0.50	780	0.059	300,000	<0.50	0.108	<0.50	132	<0.30	23	265,000	4,270	<2.0	0.56	<2.0	2,280,000	<0.050	<5.0	0.337	3.14	<3.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-13	T	108	<0.50	<2.0	118	<0.50	740	0.072	277,000	0.83	0.203	0.92	2,100	0.47	21	248,000	3,910	<2.0	2.21	<2.0	2,140,000	<0.050	6.9	0.366	3.47	8.8
P7-3A ^	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Dec-13	T	56.6	<0.50	<2.0	126	<0.50	730	0.060	324,000	<0.50	0.140	0.64	1,180	0.48	22	280,000	4,560	<2.0	0.75	<2.0	2,390,000	<0.050	<5.0	0.409	3.59	3.6
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	D	50.5	0.112	1.09	10.7	<0.010	282	0.034	24,800	<1.0	0.13	<0.40	43	<0.10	6.53	18,200	495	0.15	<0.40	<0.40	288,000	<0.0040	3.67	0.0730	6.14	<2.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	10-Mar-14	T	59.3	0.161	1.32	10.5	0.011	289	0.018	24,500	<1.0	<0.10	<1.0	89	0.45	6.83	18,100	497	0.32	<0.40	<0.40	303,000	<0.0040	4.82	0.0908	6.38	<6.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Jun-14	D	18.4	0.064	0.737	28.3	0.0091	173	<0.0050	165,000	<0.50	0.052	0.22	938	<0.050	23.9	76,600	2,470	0.073	0.52	0.21	284,000	<0.0020	1.42	0.0787	2.98	2.3
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Jun-14	T	421	0.176	1.08	36.0	0.0237	209	0.0243	167,000	1.19	0.374	1.57	2,400	0.833	29.0	76,600	2,530	0.413	0.87	0.23	287,000	0.0054	18.9	0.142	4.44	5.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-14	D	21.7	<0.50	3.9	554	<0.50	2,150	<0.050	641,000	<0.50	0.194	0.58	44	<0.30	56	796,000	6,050	<2.0	0.51	<2.0	6,300,000	<0.050	<5.0	0.224	3.67	<3.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	12-Sep-14	T	87.9	<0.50	4.8	532	<0.50	2,050	<0.050	607,000	0.61	0.258	0.80	792	0.45	54	738,000	5,820	<2.0	0.88	<2.0	5,890,000	<0.050	5.9	0.217	3.99	5.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	3-Dec-14	D	33.2	0.111	1.14	39.7	<0.010	340	<0.010	119,000	<1.0	<0.10	<0.40	142	<0.10	14.4	82,300	2,520	0.12	1.05	1.36	716,000	<0.0040	2.40	0.0409	4.62	2.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	3-Dec-14	T	252	0.242	1.96	75.0	0.013	525	0.015	141,000	<1.0	0.20	1.0	2,140	0.48	17.6	113,000	3,050	0.49	2.67	<0.40	992,000	<0.0040	9.81	0.0706	5.24	<6.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	D	12.8	0.172	0.76	40.9	<0.010	210	<0.010	192,000	<1.0	<0.10	<0.40	1,600	<0.10	14.2	118,000	2,730	1.31	<0.40	<0.40	624,000	<0.0040	1.01	0.0962	2.19	4.80
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	13-Mar-15	T	16.7	<0.26	1.27	38.1	<0.010	198	<0.010	174,000	<1.0	<0.10	<1.0	1,610	0.28	14.4	98,800	2,250	1.66	<0.40	<0.40	482,000	<0.010	1.39	0.244	2.25	<6.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	D	12.5	<0.50	4.1	520	<0.50	2,300	<0.050	554,000	<0.50	<0.050	<0.50	53	<0.30	34	799,000	4,700	<2.0	<0.50	<2.0	6,840,000	<0.050	<5.0	0.230	2.96	<3.0
DUP-6 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	D	12.4	<0.50	4.2	506	<0.50	2,240	<0.050	539,000	<0.50	0.059	<0.50	68	<0.30	33	779,000	4,660	<2.0	<0.50	<2.0	6,330,000	<0.050	<5.0	0.223	2.99	<3.0
QA/QC RPD										Duplicates	D	1%	---	2%	3%	---	3%	---	3%	---	---	---	25%	---	3%	3%	1%	---	---	---	8%	---	---	3%	1%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	T	34.9	0.58	6.8	507	<0.50	2,250	<0.050	537,000	<0.50	0.173	0.61	4,340	<0.30	34	754,000	4,590	<2.0	0.89	<2.0	6,280,000	<0.050	<5.0	0.260	3.21	13.0
DUP-6 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	17-Jun-15	T	39.9	0.53	6.1	517	<0.50	2,270	<0.050	538,000	<0.50	0.222	0.79	6,110	<0.30	33	769,000	4,740	<2.0	1.07	<2.0	6,260,000	<0.050	<5.0	0.243	3.12	9.0
QA/QC RPD										Duplicates	T	13%	9%	11%	2%	---	1%	---	0%	---	---	---	34%	---	3%	2%	3%	---	---	---	0%	---	---	7%	3%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	11-Sep-15	D	34.4	<0.50	<2.0	227	<0.50	1,720	<0.050	440,000	<0.50	0.077	<0.50	458	<0.30	59	542,000	12,500	<2.0	2.99	<2.0	4,420,000	<0.050	<5.0	0.069	2.95	6.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	11-Sep-15	T	109	1.05	<2.0	244	<0.50	1,780	<0.050	442,000	1.13	0.172	1.56	3,000	0.65	64	533,000	12,700	<2.0	2.83	<2.0	4,320,000	<0.050	<5.0	0.078	3.30	15.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-Dec-15	D	27.3	<0.50	<2.0	99.4	<0.50	920	<0.050	209,000	<0.50	0.059	<0.50	15	<0.30	<20	204,000	4,920	<2.0	<0.50	<2.0	2,040,000	<0.050	<5.0	<0.050	5.96	<3.0
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	9-Dec-15	T	68.4	<0.50	<2.0	59.8	<0.50	770	<0.050	135,000	0.51	0.105	0.78	476	<0.30	<20	126,000	2,860	<2.0	<0.50	<2.0	1,530,000	<0.050	7.7	<0.050	7.16	3.3
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	D	52.5	0.058	0.391	10.7	0.0091	142	0.0105	74,200	<0.50	0.056	0.39	194	0.064	7.98	32,700	1,370	<0.050	0.39	0.43	188,000	<0.0020	2.46	0.0292	4.54	4.6
DUP-6 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	D	54.7	0.052	0.387	10.6	0.0096	143	0.0091	72,700	<0.50	<0.050	<0.20	196	<0.050	8.23	32,900	1,440	<0.050	0.23	0.51	189,000	<0.0020	2.68	0.0283	4.78	1.9
QA/QC RPD										Duplicates	D	4%	11%	1%	1%	---	1%	---	2%	---	---	---	1%	---	3%	1%	5%	---	---	---	1%	---	9%	3%	5%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	T	61.7	0.068	0.608	10.9	0.0106	149	0.0155	70,600	<0.50	0.066	0.79	341	0.400	8.20	30,800	1,370	0.113	0.23	0.24	176,000	<0.0050	3.13	0.0384	4.57	<3.0
DUP-6 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	2-Mar-16	T	60.1	0.076	0.559	11.0	0.0089	146	0.0159	71,300	<0.50	0.064	0.80	341	0.403	8.02	31,200	1,320	0.114	0.24	0.24	181,000	<0.0050	3.28	0.0377	4.54	<3.0
QA/QC RPD										Duplicates	T	3%	---	8%	1%	---	2%	---	1%	---	---	---	0%	1%	2%	1%	4%	---	---	---	3%	---	5%	2%	1%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-May-16	D	13.7	<0.50	<2.0	248	<0.50	1,100	<0.050	428,000	<0.50	<0.050	<0.50	4,410	<0.30	37	458,000	7,180	<2.0	0.61	<2.0	3,760,000	<0.050	<5.0	0.406	3.35	8.8
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-May-16	T	74.0	<0.50	<2.0	252	<0.50	1,220	0.082	414,000	<0.50	0.133	1.20	5,360	0.45	38	442,000	6,800	<2.0	0.99	<2.0	3,590,000	<0.050	<5.0	0.399	3.53	7.3
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Aug-16	D	29.3	<0.50	<2.0	377	<0.50	2,420	<0.050	481,000	<0.50	0.125	<0.50	395	<0.30	52	810,000	2,780	<2.0	<0.50	<2.0	6,210,000	<0.050	<5.0	0.211	3.45	4.1
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	19-Aug-16	T	197	0.61	<2.0	403	<0.50	2,600	<0.050	470,000	0.83	0.303	1.31	2,200	0.61	55	788,000	2,730	<2.0	<0.50	<2.0	5,960,000	<0.050	8.6	0.225	4.22	11.9
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	D	24.8	<0.50	<2.0	74.9	<0.50	650	<0.050	204,000	<0.50	0.050	<0.50	20	<0.30	22	218,000	2,850	<2.0	<0.50	<2.0	1,570,000	<0.050	<5.0	<0.050	4.30	<3.0
DUP-5 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	D	26.3	<0.50	<2.0	77.2	<0.50	630	<0.050	204,000	<0.50	<0.050	<0.50	21	<0.30	21	215,000	3,060	<2.0	<0.50	<2.0	1,560,000	<0.050	<5.0	<0.050	4.58	<3.0
QA/QC RPD										Duplicates	D	6%	---	---	3%	---	3%	---	0%	---	---	---	---	---	5%	1%	7%	---	---	---	1%	---	---	---	6%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	T	76.8	0.69	<2.0	79.0	<0.50	600	<0.050	191,000	<0.50	0.097	1.01	545	0.41	21	182,000	3,020	<2.0	<0.50	<2.0	1,360,000	<0.050	5.5	<0.050	5.08	6.1
DUP-5 (P7-3)	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Nov-16	T	73.2	0.72	<2.0	77.0	<0.50	590	<0.050	187,000	<0.50	0.086	1.38	525	0.42	21	175,000	2,970	<2.0	<0.50	<2.0	1,320,000	<0.050	<5.0	<0.050	5.11	6.2
QA/QC RPD										Duplicates	T	5%	4%	---	3%	---	2%	---	2%	---	---	---	4%	2%	0%	4%	2%	---	---	---	3%	---	---	---	1%	---
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Mar-17	D	35.2	0.080	0.279	12.3	0.0093	121	0.0230	67,500	<0.50	<0.050	0.29	335	0.141	6.72	30,100	1,040	0.081	0.52	<0.20	150,000	<0.0020	1.30	0.0173	2.86	6.6
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	16-Mar-17	T	167	0.272	0.791	17.2	0.0157	158	0.0376	71,300	0.72	0.196	1.26	3,340	0.601	7.72	37,500	1,290	0.419	0.98	<0.20	197,000	<0.0050	6.45	0.0348	3.87	10.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	7-Jun-17	D	15.9	0.077	0.24	60.3	<0.010	376	<0.010	163,000	<1.0	<0.10	<0.40	6,060	<0.10	21.9	111,000	5,530	<0.10	<0.40	<0.40	904,000	<0.0040	0.80	0.0187	2.48	2.2
P7-3	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	7-Jun-17	T	35.0	0.112	0.31	85.0	<0.010	388	0.015	237,000	<1.0	<0.10	<1.0	11,300	0.29	25.4	155,000	7,930	0.14	<0.40	<0.40	1,150,000	<0.010	1.92	0.0228	3.12	<6.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	D	5.1	0.75	2.1	619	<0.50	540	0.589	289,000	<0.50	34.0	2.00	10	<0.30	21	223,000	12,100	2.4	27.7	<2.0	1,730,000	<0.050	<5.0	6.27	<0.50	15.9
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	D	<5.0	<0.50	<4.0	145	<0.50	3,080	<0.050	330,000	<0.50	12.7	<0.50	554	<0.30	42	759,000	4,970	6.3	9.71	<2.0	6,950,000	<0.050	<5.0	8.10	<0.50	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	D	2.9	0.170	3.67	113	<0.010	519	<0.010	57,100	<1.0	1.02	<0.40	874	<0.10	16.0	61,000	1,100	0.80	1.46	<0.40	595,000	<0.0040	<0.40	0.262	0.38	3.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	---													Well Not Sampled												
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-13	D	9.1	0.134	2.84	614	<0.010	271	0.010	234,000	<1.0	1.91	<0.40	4,540	<0.10	28.2	153,000	4,030	0.67	2.32	<0.40	751,000	<0.0040	0.74	1.40	1.28	2.4
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	D	7.5	<0.50	4.8	978	<0.50	1,000	<0.050	357,000	<0.50	3.00	<0.50	9,440	<0.30	50	416,000	4,720	<2.0	5.98	<2.0	3,050,000	<0.050	<5.0	2.04	1.69	6.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	T	450	<0.50	5.3	1,190	<0.50	1,030	0.062	380,000	0.71	3.63	2.11	11,100	0.94	54	436,000	5,200	<2.0	7.80	<2.0	3,080,000	0.065	22.2	2.19	2.82	15.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	D	<5.0	<0.50	<2.0	167	<0.50	3,420	<0.050	287,000	<0.50	0.612	<0.50	9,680	<0.30	84	776,000	1,640	3.0	1.53	<2.0	7,330,000	<0.050	<5.0	1.49	0.90	4.9
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Sep-13	T	297	<0.50	<3.0	184	<0.50	3,290	<0.050	293,000	0.69	0.914	1.58	10,300	0.65	80	775,000	1,740	3.8	2.26 J+	<2.0	7,300,000	<0.050	15.2	1.87	1.74	<12 U
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	D	5.8	<0.50	<2.0	646	<0.50	940	<0.050	299,000	<0.50	0.372	<0.50	4,010	<0.30	39	339,000	2,490	<2.0	0.67	<2.0	2,710,000	<0.050	<5.0	0.535	1.28	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-13	T	224	<0.50	2.3	623	<0.50	960	<0.050	282,000	<0.50	0.650	1.18	4,680	0.52	39	317,000	2,500	<2.0	1.63	<2.0	2,550,000	<0.050	9.9	0.570	1.97	8.5
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	D	14.1	0.166	2.03	60.9	<0.010	383	<0.010	23,000	<1.0	0.20	<0.40	164	<0.10	8.13	17,900	337	0.13	<0.40	<0.40	365,000	<0.0040	1.16	0.0695	2.81	2.2
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	T	156	0.250	2.27	97.5	<0.010	398	0.026	34,600	<1.0	0.34	<1.0	700	0.48	9.69	26,000	474	0.29	0.76	<0.40	409,000	<0.012	6.25	0.103	2.99	6.6
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	D	7.5	0.128	1.68	722	<0.010	303	<0.010	335,000	<1.0	0.18	<0.40	1,710	<0.10	34.9	281,000	6,330	0.15	0.57	<0.40	799,000	<0.0040	0.99	0.359	2.38	2.2
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Jun-14	T	128	0.234	2.01	723	<0.010	321	0.032	334,000	<1.0	0.33	<1.0	2,080	0.36	35.8	279,000	6,310	0.35	0.79	<0.40	777,000	0.0090	5.99	0.378	2.76	<6.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	D	<5.0	<0.50	13	367	<0.50	3,070	<0.050	421,000	<0.50	0.123	<0.50	47	<0.30	77	873,000	2,660	<2.0	<0.50	<2.0	7,540,000	<0.050	<5.0	0.299	2.38	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	T	113	0.54	15	385	<0.50	2,940	<0.050	420,000	<0.50	0.281	0.65	421	0.32	74	865,000	2,580	<2.0	0.79	<2.0	7,590,000	<0.050	6.6	0.320	2.70	5.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	D	4.9	0.049	0.73	113	<0.010	435	<0.010	136,000	<1.0	<0.10	<0.40	146	<0.10	23.4	104,000	2,550	<0.10	0.42	0.94	893,000	<0.0040	0.90	0.0314	2.50	<2.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	T	371	0.231	1.32	117	0.017	416	0.045	95,200	<1.0	0.37	1.5	1,260	0.79	19.4	73,800	2,010	0.31	2.21	<0.40	645,000	0.0178	15.4	0.0763	4.36	14.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	D	6.6	0.048	0.312	42.2	<0.0050	254	<0.0050	49,800	<0.50	0.071	0.23	115	<0.050	10.9	35,700	779	<0.050	0.43	<0.20	372,000	<0.0020	0.87	0.0139	2.85	3.8
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	T	114	<0.11	0.418	66.5	0.0088	270	0.0177	50,400	<0.50	0.155	<0.50	436	0.265	11.9	35,100	824	0.090	0.43	<0.20	370,000	0.0055	5.00	0.0276	3.27	3.9
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	D	<5.0	<0.50	<2.0	947	<0.50	1,920	<0.050	597,000	<0.50	<0.050	<0.50	15	<0.30	41	771,000	5,600	<2.0	<0.50	<2.0	6,400,000	<0.050	<5.0	<0.050	2.77	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	T	158	<0.50	<2.0	923	<0.50	1,860	<0.050	568,000	<0.50	0.225	0.61	487	<0.30	41	752,000	6,040	<2.0	0.80	<2.0	6,130,000	<0.050	9.4	0.059	3.40	5.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	D	<5.0	<0.50	<2.0	187	<0.50	2,240	<0.050	357,000	<0.50	0.052	<0.50	11	<0.30	71	687,000	487	<2.0	<0.50	<2.0	5,510,000	<0.050	<5.0	0.069	3.36	5.1
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-15	T	156	0.77	<2.0	225	<0.50	2,130	<0.050	346,000	1.05	0.252	0.96	601	0.58	72	666,000	501	<2.0	1.71	<2.0	5,360,000	<0.050	9.7	0.083	4.65	11.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	D	<5.0	<0.50	<2.0	43.3	<0.50	850	<0.050	93,500	<0.50	<0.050	<0.50	29	<0.30	37	102,000	736	<2.0	<0.50	<2.0	1,410,000	<0.050	<5.0	<0.050	2.55	3.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	T	23.0	<0.50	<2.0	42.2	<0.50	860	<0.050	93,800	<0.50	0.054	<0.50	194	<0.30	38	104,000	791	<2.0	<0.50	<2.0	1,420,000	<0.050	<5.0	<0.050	2.72	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	D	10.8	0.067	0.31	13.1	<0.010	382	0.012	53,300	<1.0	<0.10	<0.40	44	<0.10	12.8	65,700	618	<0.10	<0.40	0.70	574,000	<0.0040	0.98	0.0307	3.69	2.9
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	T	266	0.157	0.55	60.0	<0.010	364	0.055	48,400	<1.0	0.30	1.4	1,470	0.78	12.1	61,200	579	0.17	1.01	<0.40	549,000	0.011	10.2	0.0560	5.29	8.9
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	D	<5.0	<0.50	<2.0	247	<0.50	850	<0.050	369,000	<0.50	<0.050	<0.50	56	<0.30	39	398,000	5,100	<2.0	<0.50	2.6	2,960,000	<0.050	<5.0	<0.050	3.32	3.3
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	T	1,410	0.50	<2.0	668	<0.50	990	0.183	406,000	2.63	1.75	6.61	4,510	2.71	49	429,000	5,590	<2.0	3.25	<2.0	3,500,000	0.061	61.7	0.261	10.6	35.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	D	<5.0	<0.50	<2.0	480	<0.50	2,120	<0.050	392,000	0.82	0.075	<0.50	59	<0.30	64	797,000	1,640	<2.0	0.86	4.8	5,980,000	<0.050	<5.0	<0.050	2.73	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	T	5,410	<0.50	2.3	1,020	<0.50	2,300	0.294	466,000	9.78	4.30	10.9	12,500	9.24	69	800,000	2,010	<2.0	13.3	<2.0	6,030,000	0.055	193	0.703	23.1	174
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	D	7.3	<0.50	<2.0	62.6	<0.50	720	<0.050	124,000	<0.50	<0.050	<0.50	2,700	<0.30	40.0	173,000	2,730	<2.0	<0.50	<2.0	1,570,000	<0.050	<5.0	<0.050	3.37	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	T	17.4	<0.50	<2.0	71.6	<0.50	770	<0.050	143,000	<0.50	<0.050	<0.50	3,050	<0.30	45	192,000	2,950	<2.0	<0.50	<2.0	1,740,000	<0.050	<5.0	<0.050	3.26	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	D	8.0	0.040	0.214	11.6	0.0055	425	0.0051	35,200	<0.50	<0.050	<0.20	53	<0.050	10.6	38,700	367	0.056	<0.20	0.25	508,000	<0.0020	0.66	0.0081	2.93	2.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	T	3,390	0.358	1.81	351	0.229	460	0.217	98,700	4.76	4.37	6.68	10,600	8.28	21.4	53,800	556	0.928	7.86	0.22	542,000	0.0641	82.8	0.823	21.5	57.7
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	D	<5.0	<0.50	<2.0	220	<0.50	430	<0.050	295,000	<0.50	<0.050	<0.50	368	<0.30	45	171,000	5,300	<2.0	<0.50	2.4	1,510,000	<0.050	<5.0	<0.050	2.10	<3.0
P7-5	Porewater EAZ	P7-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	T	30.6	<0.50	<2.0	238	<0.50	440	<0.050	348,000	<0.50	0.058	<0.50	481	<0.30	46	201,000	5,770	<2.0	<0.50	<2.0	1,650,000	<0.050	<5.0	<0.050	2.29	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	4-Jun-12	D	27.0	<0.50	3.0	80.7	<0.50	470	<0.050	117,000	<0.50	0.957	4.41	9,220	<0.30	24	124,000	3,380	<2.0	1.53	<2.0	1,040,000	<0.050	<5.0	0.724	2.37	16.8
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-12	D	21.1	<0.50	<8.0	371	<0.50	2,290	<0.050	403,000	<0.50	1.27	<0.50	11,000	<0.30	75	754,000	4,850	<2.0	1.47	<2.0	6,070,000	<0.050	<5.0	1.19	4.46	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-12	D	49.4	0.130	2.12	15.1	0.0212	192	<0.0050	47,700	<0.50	0.064	0.30	3,720	<0.050	7.39	45,600	1,990	0.058	0.44	0.50	275,000	<0.0020	1.91	0.0406	4.96	3.9
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	25-Feb-13	---													Well Not Sampled												
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Mar-13	D	36.4	0.044	0.835	6.19	0.0121	40.9	0.0371	54,300	<0.50	0.113	<0.20	8,760	<0.050	4.78	21,900	3,940	<0.050	0.46	<0.20	39,000	<0.0020	1.22	0.0107	2.88	3.2
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Jun-13	D	25.5	0.074	1.17	54.8	0.0161	230	0.0104	79,500	<0.50	<0.050	<0.20	5,790	<0.050	9.40	73,500	3,660	0.052	2.48	0.38	443,000	<0.0020	1.06	0.0137	3.14	3.6
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Sep-13	D	22.9	<0.50	<2.0	319	<0.50	1,090	<0.050	499,000	0.52	0.167	<0.50	3,080	<0.30	26	451,000	20,300	<2.0	0.67	<2.0	2,730,000	<0.050	<5.0	0.103	4.57	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Jun-13	T	40.1	0.099	1.32	63.6	0.0180	259	0.0095 J	80,800	<0.50	0.081 J	0.66 J	6,350	0.116 J	10.6	75,000	3,720	0.125	2.65	<0.20	447,000	<0.0020	1.77	0.0174	4.01	4.8
P7.5-3-A @	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Jun-13	D	24.8	0.180	13.3	35.9	0.0220	139	<0.0050	127,000	<0.50	<0.050	<0.20	8,910	<0.050	9.94	74,600	5,290	0.154	<0.20	0.58	305,000	<0.0020	1.13	0.0441	3.16	1.3
P7.5-3-A @	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Jun-13	T	25.5	0.208	13.0	38.1	0.0196	144	<0.0050	129,000	<0.50	<0.050	<0.50	9,050	0.174	10.3	74,100	5,010	0.226	<0.20	<0.20	298,000	<0.0020	1.31	0.0450	3.04	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Sep-13	T	34.0	<0.50	<2.0	339	<0.50	1,160	<0.050	508,000	<0.50	0.083	0.64	3,380	<0.30	27	458,000	21,200	<2.0	0.60 J+	<2.0	2,640,000	<0.050	<5.0	0.111	4.83	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-13	D	35.0	<0.50	<2.0	65.3	<0.50	310	<0.050	155,000	<0.50	0.083	<0.50	3,160	<0.30	<20	121,000	9,120	<2.0	<0.50	<2.0	829,000	<0.050	<5.0	<0.050	4.36	3.5
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Dec-13	T	44.1	<0.50	<2.0	64.6	<0.50	300	<0.050	156,000	<0.50	<0.050	<0.50	3,480	<0.30	<20	121,000	9,190	<2.0	<0.50	<2.0	837,000	<0.050	<5.0	<0.050	5.15	3.4
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	D	90.5	0.050	0.657	9.64	0.0212	167	0.0073 J	21,900	0.62	0.096 J	<0.20	772	<0.050	3.12	19,700	1,350	<0.050	0.25 J	<0.20	212,000	<0.0020	4.06	0.0373	7.94	1.6 J
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	T	101	0.067	0.721	7.12	0.0192	162	0.0076	15,000	0.68	0.053	<0.50	661	0.168	3.24	13,700	993	0.098	<0.20	0.23	164,000	<0.0020	5.49	0.0448	7.90	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	D	36.2	0.140	5.58	9.00	0.0169	171	<0.0050	52,300	<0.50	<0.050	<0.20	4,490	<0.050	11.6	66,700	2,530	0.290	0.36	<0.20	341,000	<0.0020	1.54	0.177	5.08	1.5 J

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	T	44.7	0.265	5.36	12.6	0.0189	203	0.0162 J	54,700	0.67	0.053	<0.50	4,510	0.186	13.3	66,100	2,850	0.558	0.31	<0.20	316,000	<0.0020	2.64	0.209	5.25	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-14	D	18.5	<0.50	<2.0	811	<0.50	1,930	<0.050	558,000	<0.50	0.076 J	<0.50	5,500	<0.30	27	724,000	23,500	<2.0	<0.50	<2.0	5,630,000	<0.050	<5.0	<0.050	3.61	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	12-Sep-14	T	24.0	<0.50	<2.0	789	<0.50	1,950	<0.050	554,000	<0.50	0.081 J	0.98	6,380	<0.30	31	698,000	22,700	<2.0	<0.50	<2.0	5,560,000	<0.050	<5.0	<0.050	3.76	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	D	37.0	0.028	0.427	12.9	0.0125	169	<0.0050 J	55,600	<0.50	<0.050	<0.20	1,140	<0.050	6.75	44,100	4,260	<0.050	0.69	0.42	292,000	<0.0020	1.72	0.0229	4.79	1.3 J
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	T	51.7	0.059	0.401	13.3	0.0174	171	0.0062	52,600	<0.50	<0.050	<0.50	1,430	0.119	6.31	39,500	3,810	0.100 J	0.48	<0.20	270,000	<0.0020	2.67	0.0251	5.65	<3.0
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	D	24.4	0.039	0.312	9.18	0.0138	144	0.0143	66,000	<0.50	<0.050	<0.20	3,750	<0.050	8.51	68,700	3,640	<0.050	<0.20	<0.20	286,000	<0.0020	0.87	0.0658	2.99	2.50
DUP-7 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	D	25.3	0.037	0.308	10.5	0.0122	145	0.0187	64,800	<0.50	<0.050	0.36	3,410	<0.050	8.6	70,400	3,480	<0.050	0.45	<0.20	291,000	<0.0020	0.98	0.0663	2.99	7.20
QA/QC RPD										Duplicates	D	4%	---	1%	13%	---	1%	---	2%	---	---	---	9%	---	1%	2%	4%	---	---	---	2%	---	---	1%	0%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	T	42.7	<0.090	0.346	10.5	0.0125	148	0.249	65,400	<0.50	<0.050	<0.50	3,770	0.102	11.4	65,700	4,630	0.109	0.26	<0.20	255,000	<0.0050	2.11	0.0653	4.00	3.90
DUP-7 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Mar-15	T	35.2	<0.090	0.336	10.4	0.0143	141	0.255	67,300	<0.50	<0.050	<0.50	3,740	0.104	9.1	68,300	3,730	0.117	0.21	<0.20	262,000	<0.0050	1.61	0.0658	3.28	4.00
QA/QC RPD										Duplicates	T	19%	---	3%	1%	---	5%	2%	3%	---	---	---	1%	---	22%	4%	22%	---	---	---	3%	---	27%	1%	20%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	D	25.7	<0.50	<2.0	419	<0.50	1,090	<0.050	379,000	<0.50	<0.050	<0.50	178	<0.30	<20	459,000	15,000	<2.0	<0.50	6	3,460,000	<0.050	<5.0	0.061	5.21	<3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	D	27.8	<0.50	<2.0	385	<0.50	1,070	<0.050	370,000	<0.50	<0.050	<0.50	203	<0.30	<20	447,000	15,200	<2.0	<0.50	11.1	3,170,000	<0.050	<5.0	0.065	5.82	<3.0
QA/QC RPD										Duplicates	D	8%	---	---	8%	---	2%	---	2%	---	---	---	13%	---	---	3%	1%	---	---	60%	9%	---	---	6%	11%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	T	23.0	<0.50	<2.0	520	<0.50	1,500	0.122	374,000	<0.50	<0.050	<0.50	306	<0.30	<20	507,000	14,400	<2.0	<0.50	<2.0	4,330,000	<0.050	<5.0	<0.050	4.25	<3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	17-Jun-15	T	22.5	<0.50	<2.0	534	<0.50	1,330	0.115	364,000	<0.50	<0.050	<0.50	330	<0.30	<20	501,000	14,700	<2.0	<0.50	<2.0	4,210,000	<0.050	<5.0	<0.050	4.55	<3.0
QA/QC RPD										Duplicates	T	---	---	---	3%	---	12%	6%	3%	---	---	---	8%	---	---	1%	2%	---	---	---	3%	---	---	---	7%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	D	14.8	<0.50	<2.0	239	<0.50	1,370	<0.050	365,000	<0.50	<0.050	<0.50	8,590	<0.30	33	424,000	27,800	<2.0	9.23	<2.0	3,230,000	<0.050	<5.0	<0.050	2.42	<3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	D	15.0	<0.50	<2.0	220	<0.50	1,330	<0.050	380,000	<0.50	<0.050	<0.50	8,560	<0.30	30.0	447,000	27,300	<2.0	8.91	<2.0	3,360,000	<0.050	<5.0	<0.050	2.35	5.40
QA/QC RPD										Duplicates	D	1%	---	---	8%	---	3%	---	4%	---	---	---	0%	---	10%	5%	2%	---	4%	---	4%	---	---	---	3%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	T	29.3	<0.50	<2.0	209	<0.50	1,270	0.118	352,000	0.60	0.062	1.02	9,360	<0.30	32	389,000	26,700	<2.0	7.80	<2.0	2,930,000	<0.050	<5.0	<0.050	2.49	<3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	11-Sep-15	T	29.1	<0.50	<2.0	197	<0.50	1,250	0.149	357,000	0.52	<0.050	1.04	9,600	<0.30	31	389,000	27,700	<2.0	7.52	<2.0	2,980,000	<0.050	<5.0	<0.050	2.56	3.60
QA/QC RPD										Duplicates	T	1%	---	---	6%	---	2%	23%	1%	---	---	---	3%	---	3%	0%	4%	---	4%	---	2%	---	---	---	3%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	D	20.1	<0.50	2.7	11.4	<0.50	750	<0.050	107,000	<0.50	<0.050	<0.50	2,840	<0.30	28	143,000	4,700	<2.0	0.52	<2.0	1,500,000	<0.050	<5.0	0.626	3.47	<3.0
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	D	19.3	<0.50	3.0	12.7	<0.50	800	<0.050	116,000	<0.50	0.051	<0.50	2,830	<0.30	34	163,000	4,750	<2.0	1.07	<2.0	1,650,000	<0.050	<5.0	0.647	3.45	6.0
QA/QC RPD										Duplicates	D	4%	---	11%	11%	---	6%	---	8%	---	---	---	0%	---	19%	13%	1%	---	---	---	10%	---	---	3%	1%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	T	56.1	<0.50	3.9	13.0	<0.50	790	0.220	118,000	7.34	0.063	0.95	3,590	<0.30	34	160,000	5,280	<2.0	1.21	<2.0	1,670,000	<0.050	<5.0	0.690	4.14	6.40
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	9-Dec-15	T	53.5	<0.50	4.2	12.5	<0.50	750	0.173	116,000	0.56	0.058	0.66	3,310	<0.30	30	160,000	4,820	<2.0	0.84	<2.0	1,600,000	<0.050	<5.0	0.654	4.29	4.6
QA/QC RPD										Duplicates	T	5%	---	7%	4%	---	5%	24%	2%	---	---	---	8%	---	13%	0%	9%	---	---	---	4%	---	---	5%	4%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	D	54.9	0.056	0.906	2.81	0.0092	273	0.0076	24,700	0.57	<0.050	0.23	809	<0.050	12.3	57,400	498	0.150	0.31	<0.20	497,000	<0.0020	2.15	0.226	5.03	3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	D	53.8	0.053	0.896	2.53	0.0093	268	0.0089	24,300	<0.50	<0.050	<0.20	816	<0.050	11.7	58,600	482	0.154	0.24	<0.20	498,000	<0.0020	2.13	0.229	4.82	1.20
QA/QC RPD										Duplicates	D	2%	6%	1%	10%	---	2%	---	2%	---	---	---	1%	---	5%	2%	3%	---	---	---	0%	---	1%	1%	4%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	T	137	0.115	1.16	3.33	0.0120	253	0.0696	22,700	0.67	0.080	0.91	1,230	0.390	11.0	54,400	483	0.358	0.40	0.22	460,000	<0.0050	6.34	0.243	5.78	3.90
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	2-Mar-16	T	146	0.114	1.14	3.41	0.0122	249	0.0866	22,600	0.70	0.084	1.01	1,220	0.406	11.4	53,900	489	0.355	0.42	0.20	454,000	<0.0050	6.47	0.251	6.12	4.40
QA/QC RPD										Duplicates	T	6%	---	2%	2%	---	2%	22%	0%	---	---	---	1%	4%	4%	1%	1%	1%	---	---	1%	---	2%	3%	6%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	D	33.4	<0.50	<2.0	70.5	<0.50	800	<0.050	149,000	<0.50	<0.050	<0.50	1,090	<0.30	25	242,000	5,420	<2.0	<0.50	2.5	1,910,000	<0.050	<5.0	0.114	3.68	<3.0
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	D	32.1	<0.50	<2.0	67.0	<0.50	730	<0.050	153,000	<0.50	<0.050	<0.50	1,010	<0.30	21	245,000	5,160	<2.0	<0.50	<2.0	1,930,000	<0.050	<5.0	0.118	3.54	<3.0
QA/QC RPD										Duplicates	D	4%	---	---	5%	---	9%	---	3%	---	---	---	8%	---	17%	1%	5%	---	---	---	1%	---	---	3%	4%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	T	198	<0.50	2.3	79.2	<0.50	890	0.055	176,000	0.61	0.121	0.89	4,250	0.39	29	292,000	5,950	<2.0	<0.50	<2.0	2,190,000	<0.050	7.5	0.151	3.94	<3.0
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	19-May-16	T	168	<0.50	2.6	87.4	<0.50	970	0.064	187,000	0.62	0.100	0.82	4,100	0.32	32	317,000	6,040	<2.0	<0.50	<2.0	2,380,000	<0.050	7.2	0.160	3.92	<3.0
QA/QC RPD										Duplicates	T	16%	---	12%	10%	---	9%	15%	6%	---	---	---	4%	20%	10%	8%	2%	---	---	---	8%	---	4%	6%	1%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	D	41.6	<0.50	<2.0	244	<0.50	1,470	0.077	254,000	<0.50	<0.050	<0.50	3,740	<0.30	29	500,000	6,790	<2.0	<0.50	2.9	3,420,000	<0.050	<5.0	<0.050	3.28	<3.0
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	D	43.1	<0.50	<2.0	268	<0.50	1,460	0.078	250,000	<0.50	<0.050	<0.50	3,810	<0.30	30.0	498,000	6,990	<2.0	<0.50	<2.0	3,420,000	<0.050	<5.0	<0.050	3.44	<3.0
QA/QC RPD										Duplicates	D	4%	---	---	9%	---	1%	1%	2%	---	---	---	2%	---	3%	0%	3%	---	---	---	0%	---	---	---	5%	---
DUP-4 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	T	208	<0.50	<2.0	351	<0.50	1,500	0.191	263,000	<0.50	0.138	0.95	9,410	0.47	30.0	520,000	7,370	<2.0	0.62	<2.0	3,530,000	<0.050	9.0	0.064	4.52	5.4
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	22-Aug-16	T	354	<0.50	<2.0	308	<0.50	1,420	0.192	257,000	0.72	0.154	1.35	9,370	0.63	28	512,000	7,060	<2.0	0.62	<2.0	3,390,000	<0.050	14.9	0.066	4.62	6.20
QA/QC RPD										Duplicates	T	52%	---	---	13%	---	5%	1%	2%	---	---	---	0%	29%	7%	2%	4%	---	---	---	4%	---	49%	3%	2%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	D	30.2	<0.50	<2.0	93.8	<0.50	470	<0.050	109,000	<0.50	<0.050	<0.50	515	<0.30	<20	187,000	4,350	<2.0	<0.50	<2.0	1,230,000	<0.050	<5.0	<0.050	4.39	<3.0
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	D	31.0	<0.50	<2.0	91.9	<0.50	480	<0.050	109,000	<0.50	<0.050	<0.50	547	<0.30	<20	182,000	4,240	<2.0	<0.50	<2.0	1,200,000	<0.050	<5.0	<0.050	4.70	<3.0
QA/QC RPD										Duplicates	D	3%	---	---	2%	---	2%	---	0%	---	---	---	6%	---	---	3%	3%	---	---	---	2%	---	---	---	7%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	T	263	<0.50	<2.0	112	<0.50	510	0.054	122,000	1.90	0.102	0.97	2,030	0.48	<20	201,000	4,660	<2.0	0.85	<2.0	1,320,000	<0.050	11.2	<0.050	5.13	4.0
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	24-Nov-16	T	209	<0.50	<2.0	108	<0.50	490	0.057	120,000	0.57	0.091	0.93	1,840	0.37	<20	194,000	4,600	<2.0	0.55	<2.0	1,280,000	<0.050	10.1	<0.050	5.31	3.1
QA/QC RPD										Duplicates	T	23%	---	---	4%	---	4%	5%	2%	---	---	---	10%	26%	---	4%	1%	---	---	---	3%	---	10%	---	3%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	D	49.0	0.035	0.31	22.1	0.013	371	0.026	41,100	<1.0	<0.10	<0.40	80	<0.10	9.30	71,800	1,340	0.16	0.55	0.60	565,000	<0.0040	2.13	0.0851	7.18	<2.0
DUP-8 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	D	44.3	0.029	0.27	21.1	<0.010	327	0.020	38,800	<1.0	<0.10	<0.40	76	<0.10	7.89	70,600	1,140	0.16	<0.40	<0.40	549,000	<0.0040	1.91	0.0737	6.57	<2.0
QA/QC RPD										Duplicates	D	10%	---	14%	5%	---	13%	---	6%	---	---	---	5%	---	16%	2%	16%	---	---	---	3%	---	11%	14%	9%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	T	151	0.092	0.288	16.0	0.0135	312	0.149	32,100	0.58	0.073	0.77	897	0.353	8.18	61,500	1,010	0.283	0.34	<0.20	484,000	<0.0050	6.02	0.0843	9.74	<3.0
DUP-8 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	16-Mar-17	T	145	0.098	0.301	16.5	0.0149	318	0.164	30,900	0.68	0.083	0.82	813	0.341	8.37	57,900	1,010	0.310	0.35	<0.20	465,000	0.0062	5.87	0.0891	9.90	<3.0
QA/QC RPD										Duplicates	T	4%	---	4%	3%	---	2%	10%	4%	---	---	---	10%	3%	2%	6%	0%	9%	---	---	4%	---	3%	6%	2%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	D	19.4	0.109	1.00	21.4	<0.010	238	0.018	92,300	<1.0	<0.10	<0.40	2,940	<0.10	22.2	82,200	6,070	0.53	0.91	<0.40	578,000	<0.0040	0.70	0.442	2.61	2.1
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	D	17.1	0.113	1.00	22.5	<0.010	244	0.020	93,400	<1.0	<0.10	<0.40	2,990	<0.10	22.3	82,300	6,290	0.56	1.01	<0.40	585,000	<0.0040	0.66	0.469	2.68	3.1
QA/QC RPD										Duplicates	D	13%	4%	0%	5%	---	2%	---	1%	---	---	---	2%	---	0%	0%	4%	6%	---	---	1%	---	---	6%	3%	---
P7.5-3	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	T	55.7	0.147	1.28	23.4	0.013	234	0.049	104,000	<1.0	<0.10	<1.0	5,020	0.19	23.9	92,200	6,520	0.66	0.98	<0.40	617,000	<0.010	2.86	0.511	6.06	<6.0
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	7-Jun-17	T	58.8	0.154	1.35	23.8	0.012	227	0.050	107,000	<1.0	<0.10	<1.0	5,130	0.20	25.0	95,900	6,570	0.68	1.03	0.66	633,000	<0.010	2.80	0.541	6.33	<6.0
QA/QC RPD										Duplicates	T	5%	---	5%	2%	---	3%	2%	3%	---	---	---	2%	---	4%	4%	1%	3%	---	---	3%	---	2%	6%	4%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-12	D	8.8	<0.50	<2.0	940	<0.50	1,230	<0.050	485,000	<0.50	0.855	<0.50	12,200	<0.30	28	644,000	15,400	<2.0	1.56	<2.0	4,530,000	<0.050	<5.0	1.70	1.78	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-12	D	6.2	<0.50	<2.0	107	<0.50	580	<0.050	67,700	<0.50	0.226	<0.50	2,970	<0.30	<20	112,000	1,200	<2.0	0.52	<2.0	837,000	<0.050	<5.0	0.739	1.02	4.5
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	25-Feb-13	---													Well Not Sampled												
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Mar-13	D	7.5	0.100	1.60	76.5	<0.0050	254	0.0114	36,900	<0.50	0.161	<0.20	3,920	<0.050	14.8	33,400	1,050	0.466	0.74	0.22	302,000	<0.0020	0.55	1.10	0.988	2.4
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	D	8.8	<0.50	<2.0	156	<0.50	250	<0.050	61,900	<0.50	0.339	<0.50	2,970	<0.30	<20	38,600	1,900	<2.0	0.54	<2.0	402,000	<0.050	<5.0	0.195	1.70	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	T	10.3	<0.50	<2.0	655	<0.50	570	<0.050	219,000	<0.50	0.756	<0.50	6,830	<0.30	28	169,000	5,300	<2.0	1.86	<2.0	1,230,000	<0.050	<5.0	0.965	1.53	4.7
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Sep-13	D	7.8	<0.50	<2.0	674	<0.50	1,710	<0.050	348,000	<0.50	0.525	<0.50	7,450	<0.30	48	515,000	8,360	<2.0	0.65	<2.0	4,490,000	<0.050	<5.0	1.16	1.76	5.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Sep-13	T	14.8	<0.50	<2.0	647	<0.50	1,680	<0.050	360,000	<0.50	0.400	<0.50	7,820	<0.30	47	528,000	8,140	<2.0	<0.50	<2.0	4,640,000	<0.050	<5.0	1.09	1.74	6.3
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-13	D	<5.0	<0.50	<2.0	129	<0.50	360	0.063	152,000	<0.50	0.157	<0.50	4,370	<0.30	<20	132,000	8,110	<2.0	<0.50	<2.0	792,000	<0.050	<5.0	0.310	1.50	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Dec-13	T	14.7	<0.50	2.2	205	<0.50	850	0.076	123,000	<0.50	0.146	0.51	4,250	<0.30	24	196,000	2,790	<2.0	0.78	<2.0	1,710,000	<0.050	<5.0	1.02	1.69	8.6
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	D	15.6	<0.50	<2.0	103	<0.50	530	<0.050	90,000	<0.50	0.152	<0.50	1,750	<0.30	21	97,500	2,350	<2.0	<0.50	<2.0	956,000	<0.050	<5.0	0.370	1.66	3.8
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Mar-14	T	30.0	<0.50	<2.0	122	<0.50	530	0.070	107,000	<0.50	0.096	<0.50	2,100	<0.30	22	114,000	2,730	<2.0	<0.50	<2.0	1,050,000	<0.050	<5.0	0.389	1.84	7.9
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	D	9.9	0.038 J	1.02	133	<0.0050	341	0.0070 J	109,000	<0.50	0.096	<0.20	312	<0.050	17.8	86,200	2,340	<0.050	2.43	<0.20	691,000	<0.0020	0.84	0.305	2.28	2.2
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	T	13.5	0.095	0.871	108	<0.0050	320	0.0330 J	91,200	0.70 J	0.105	<0.50	380	0.086	15.9	70,200	2,090	0.057 J	1.69	<0.20	554,000	<0.0020	1.26	0.259	2.48	6.2
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	D	5.6	<0.50	3.2	546	<0.50	950	<0.050	269,000	<0.50	0.107 J	<0.50	306	<0.30	23	360,000	5,590	<2.0	<0.50	<2.0	2,800,000	<0.050	<5.0	0.533	2.37	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	T	11.7	0.56	5.7	653	<0.50	1,340	<0.050	322,000	<0.50	0.116	<0.50	301	<0.30	32	467,000	5,610	<2.0	<0.50	<2.0	3,770,000	<0.050	<5.0	0.549	2.80	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	D	10.5	<0.50	3.0	136	<0.50	830	<0.050	70,400	<0.50	0.078 J	<0.50	56	<0.30	<20	108,000	1,230	<2.0	<0.50	<2.0	1,160,000	<0.050	<5.0	0.132	2.96	<3.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	T	20.7	<0.50	3.6	129	<0.50	820	0.054	69,900	<0.50	0.092	<0.50	153	<0.30	<20	104,000	1,220	<2.0	<0.50	<2.0	1,160,000	<0.050	<5.0	0.127	3.11	4.8
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	D	7.5	0.103	1.22	48.0	<0.0050	312	0.0053	37,100	<0.50	0.088	<0.20	85	<0.050	6.77	53,700	568	0.076	0.47	<0.20	482,000	<0.0020	0.84	0.0642	2.45	3.1
DUP-6 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	D	7.2	0.129	1.34	46.3	<0.0050	303	<0.0050	34,400	<0.50	0.076	<0.20	85	<0.050	6.77	50,000	577	0.158	0.39	<0.20	438,000	<0.0020	0.82	0.0646	2.49	1.4
QA/QC RPD										Duplicates	D	4%	22%	9%	4%	---	3%	---	8%	---	---	---	0%	---	0%	7%	2%	---	---	---	10%	---	---	1%	2%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	T	230	0.859	4.44	92.7	0.0106	372	0.529	49,300	1.07	0.501	1.61	7,780	0.688	11.5	71,700	1,010	1.01	1.88	<0.20	559,000	<0.0050	11.9	0.142	4.45	79.7
DUP-6 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Mar-15	T	146	0.691	3.15	82.3	0.0181	346	0.36	46,000	0.73	0.317	1.42	4,800	0.414	10.4	66,600	938	0.815	1.33	<0.20	523,000	<0.0050	6.51	0.112	3.55	45.4
QA/QC RPD										Duplicates	T	45%	22%	34%	12%	---	7%	38%	7%	---	45%	---	47%	50%	10%	7%	7%	21%	34%	---	7%	---	59%	24%	23%	55%
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	D	<5.0	<0.50	<2.0	646	<0.50	840	<0.050	449,000	<0.50	<0.050	<0.50	64	<0.30	20.0	448,000	8,670	<2.0	<0.50	5.9	2,430,000	<0.050	<5.0	0.102	1.86	<3.0
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	D	<5.0	<0.50	<2.0	649	<0.50	860	<0.050	447,000	<0.50	0.054	<0.50	64	<0.30	21	453,000	8,890	<2.0	<0.50	8.8	2,440,000	<0.050	<5.0	0.098	1.87	<3.0
QA/QC RPD										Duplicates	D	---	---	---	0%	---	2%	---	0%	---	---	---	0%	---	5%	1%	3%	---	---	39%	0%	---	---	4%	1%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	T	10.8	<0.50	<2.0	618	<0.50	850	0.142	429,000	<0.50	0.068	<0.50	279	<0.30	<20	427,000	8,620	<2.0	<0.50	<2.0	2,370,000	<0.050	<5.0	0.098	1.96	4.7
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	17-Jun-15	T	10.0	<0.50	<2.0	653	<0.50	720	0.145	461,000	<0.50	0.073	<0.50	296	<0.30	28	441,000	8,940	<2.0	<0.50	<2.0	2,500,000	<0.050	<5.0	0.108	2.02	4.3
QA/QC RPD										Duplicates	T	---	---	---	6%	---	17%	2%	7%	---	---	---	6%	---	---	3%	4%	---	---	---	5%	---	---	10%	3%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	D	8.5	0.93	18.9	672	<0.50	1,340	<0.050	412,000	<0.50	0.130	<0.50	18	<0.30	31	636,000	6,730	<2.0	<0.50	<2.0	5,040,000	<0.050	<5.0	0.278	3.29	<3.0
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	D	9.1	1.30	20.5	668	<0.50	1,400	<0.050	425,000	<0.50	0.138	<0.50	18	<0.30	55	657,000	6,720	<2.0	<0.50	<2.0	5,350,000	<0.050	<5.0	0.300	3.37	<3.0
QA/QC RPD										Duplicates	D	7%	33%	8%	1%	---	4%	---	3%	---	---	---	---	---	56%	3%	0%	---	---	---	6%	---	---	8%	2%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	T	16.9	1.81	29	662	<0.50	1,350	0.099	405,000	<0.50	0.148	<0.50	403	<0.30	31	623,000	6,640	<2.0	<0.50	<2.0	5,030,000	<0.050	<5.0	0.267	3.32	7.2
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Sep-15	T	17.7	1.87	27.8	721	<0.50	1,510	0.094	417,000	<0.50	0.148	<0.50	398	<0.30	33	659,000	6,760	<2.0	<0.50	<2.0	5,170,000	<0.050	<5.0	0.293	3.38	7.5
QA/QC RPD										Duplicates	T	---	3%	4%	9%	---	11%	5%	3%	---	---	---	1%	---	6%	6%	2%	---	---	---	3%	---	---	9%	2%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	D	6.0	<0.50	2.1	121	<0.50	740	<0.050	97,600	<0.50	0.096	<0.50	37	<0.30	<20	130,000	2,160	<2.0	<0.50	<2.0	1,400,000	<0.050	<5.0	<0.050	2.34	<3.0
DUP-3 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	D	7.1	<0.50	2.6	120	<0.50	690	<0.050	97,800	0.71	0.112	<0.50	36	<0.30	<20	129,000	2,290	<2.0	<0.50	<2.0	1,300,000	<0.050	<5.0	<0.050	2.46	<3.0
QA/QC RPD										Duplicates	D	17%	---	21%	1%	---	7%	---	0%	---	---	---	---	---	---	1%	6%	---	---	---	7%	---	---	---	5%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	T	16.8	<0.50	2.7	124	<0.50	740	0.105	102,000	2.00	0.126	<0.50	352	<0.30	<20	133,000	2,440	<2.0	<0.50	<2.0	1,420,000	<0.050	<5.0	<0.050	2.47	6.2
DUP-3 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	9-Dec-15	T	15.2	<0.50	3.7	134	<0.50	750	0.164	106,000	0.57	0.134	<0.50	297	<0.30	<20	139,000	2,420	<2.0	<0.50	<2.0	1,480,000	<0.050	<5.0	0.055	2.66	5
QA/QC RPD										Duplicates	T	---	---	31%	8%	---	1%	44%	4%	---	---	---	17%	---	---	4%	1%	---	---	---	4%	---	---	---	7%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	2-Mar-16	D	10.3	0.058	1.39	79.6	<0.010	472	0.016	67,700	<1.0	0.11	<0.40	<60	<0.10	11.3	106,000	1,680	<0.10	<0.40	<0.40	963,000	<0.0040	0.74	0.0425	2.25	2.3
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	2-Mar-16	T	22.5	0.118	1.38	77.8	<0.010	477	0.100	65,900	<1.0	0.14	<1.0	146	<0.10	11.6	103,000	1,610	<0.10	<0.40	<0.40	923,000	<0.010	1.20	0.0403	2.57	<6.0
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	D	7.9	<0.50	2.1	141	<0.50	2,190	<0.050	151,000	<0.50	0.140	<0.50	160	<0.30	58	440,000	841	<2.0	<0.50	<2.0	4,070,000	<0.050	<5.0	1.10	3.33	4.5
DUP-7 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	D	7.1	<0.50	2.1	136	<0.50	2,140	<0.050	150,000	<0.50	0.133	<0.50	197	<0.30	58	438,000	879	<2.0	<0.50	<2.0	4,080,000	<0.050	<5.0	1.12	3.38	<3.0
QA/QC RPD										Duplicates	D	11%	---	0%	4%	---	2%	---	1%	---	---	---	21%	---	0%	0%	4%	---	---	---	0%	---	---	2%	1%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	19-May-16	T	92.1	<0.50	2.5	139	<0.50	2,210	0.26	152,000	0.67	0.292	0.84	2,020	<0.30	66	444,000	842	<2.0	0.66	<2.0	4,100,000	<0.050	5.1	1.2	3.92	15
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	D	10.1	<0.50	<2.0	183	<0.50	940	0.079	266,000	<0.50	0.097	<0.50	300	<0.30	33	342,000	5,540	<2.0	<0.50	<2.0	2,390,000	<0.050	<5.0	0.172	2.61	<3.0
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	D	13.4	<0.50	<2.0	185	<0.50	960	0.060	263,000	<0.50	0.121	<0.50	44	<0.30	33	343,000	5,650	<2.0	<0.50	<2.0	2,390,000	<0.050	<5.0	0.168	2.56	<3.0
QA/QC RPD										Duplicates	D	28%	---	---	1%	---	2%	27%	1%	---	---	---	---	---	0%	0%	2%	---	---	---	0%	---	---	2%	2%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	T	37.2	<0.50	<2.0	190	<0.50	930	0.199	270,000	<0.50	0.153	<0.50	472	<0.30	34	345,000	5,780	<2.0	<0.50	<2.0	2,380,000	<0.050	<5.0	0.164	2.83	8.5
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	22-Aug-16	T	28.9	<0.50	<2.0	188	<0.50	920	0.183	268,000	<0.50	0.154	<0.50	475	<0.30	34	341,000	5,960	<2.0	<0.50	<2.0	2,380,000	<0.050	<5.0	0.168	2.86	8.5
QA/QC RPD										Duplicates	T	25%	---	---	1%	---	1%	8%	1%	---	---	---	1%	---	0%	1%	3%	---	---	---	0%	---	---	2%	1%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	D	9.7	<0.50	<2.0	68.8	<0.50	490	<0.050	79,700	<0.50	0.170	<0.50	21	<0.30	<20	97,500	2,040	<2.0	<0.50	<2.0	1,020,000	<0.050	<5.0	0.054	3.36	<3.0
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	D	9.9	<0.50	<2.0	70.3	<0.50	490	<0.050	79,200	<0.50	0.161	<0.50	20	<0.30	<20	96,400	2,000	<2.0	<0.50	<2.0	1,020,000	<0.050	<5.0	0.055	3.36	<3.0
QA/QC RPD										Duplicates	D	2%	---	---	2%	---	0%	---	1%	---	---	---	---	---	---	1%	2%	---	---	---	0%	---	---	2%	0%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	T	62.5	0.59	<2.0	74.9	<0.50	520	0.415	79,100	0.58	0.210	0.69	169	<0.30	<20	91,600	1,970	<2.0	<0.50	<2.0	971,000	<0.050	<5.0	0.069	3.70	8.1
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	24-Nov-16	T	68.7	0.60	<2.0	70.9	<0.50	510	0.472	78,700	0.56	0.221	0.70	178	<0.30	<20	92,300	2,050	<2.0	<0.50	<2.0	991,000	<0.050	<5.0	0.068	3.92	7.9
QA/QC RPD										Duplicates	T	9%	2%	---	5%	---	2%	13%	1%	---	---	---	5%	---	---	1%	4%	---	---	---	2%	---	---	1%	6%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	D	8.0	0.059	0.29	36.6	<0.010	293	0.017	50,100	<1.0	<0.10	<0.40	<30	<0.10	6.76	61,000	1,040	<0.10	<0.40	1.25	585,000	<0.0040	0.73	0.0258	2.04	<2.0
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	D	5.9	0.033	0.31	41.3	<0.010	328	0.018	51,900	<1.0	<0.10	<0.40	<30	<0.10	6.69	65,500	1,030	<0.10	<0.40	<0.40	610,000	<0.0040	0.64	0.0266	1.72	<2.0
QA/QC RPD										Duplicates	D	30%	---	7%	12%	---	11%	---	4%	---	---	---	---	---	1%	7%	1%	---	---	---	4%	---	---	3%	17%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	T	26.8	0.093	0.28	31.5	<0.010	340	0.115	42,600	<1.0	0.13	<1.0	99	0.14	6.57	56,100	969	<0.10	<0.40	<0.40	552,000	<0.010	1.60	0.0234	2.46	<6.0
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	16-Mar-17	T	22.8	0.093	0.33	30.8	<0.010	326	0.121	42,900	<1.0	0.11	<1.0	111	0.14	6.25	57,500	838	<0.10	<0.40	<0.40	560,000	<0.010	1.75	0.0228	2.08	<6.0
QA/QC RPD										Duplicates	T	---	---	16%	2%	---	4%	5%	1%	---	---	---	11%	---	5%	2%	14%	---	---	---	1%	---	9%	3%	17%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	D	7.4	0.025	0.169	15.5	<0.0050	248	<0.0050	19,700	<0.50	0.115	<0.20	38	<0.050	4.56	24,800	399	<0.050	<0.20	0.58	278,000	<0.0020	0.86	0.0155	3.21	1.3
DUP-1 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	D	7.3	0.024	0.144	14.8	<0.0050	237	<0.0050	18,700	<0.50	0.113	<0.20	38	<0.050	4.56	23,700	382	<0.050	<0.20	0.47	270,000	<0.0020	0.89	0.0145	3.25	<1.0
QA/QC RPD										Duplicates	D	1%	---	---	5%	---	5%	---	5%	---	---	---	---	---	0%	5%	4%	---	---	---	3%	---	---	7%	1%	---
P8-3	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	T	15.4	0.047	0.232	20.9	<0.0050	282	0.0167	25,500	<0.50	0.138	<0.50	86	<0.050	6.19	34,600	567	<0.050	<0.20	<0.20	318,000	<0.0050	1.31	0.0214	2.95	<3.0
DUP-1 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	7-Jun-17	T	15.4	0.039	0.228	22.4	<0.0050	296	0.0167	26,100	<0.50	0.155	<0.50	89	<0.050	6.31	35,800	582	<0.050	<0.20	<0.20	326,000	<0.0050	1.43	0.0228	2.96	<3.0
QA/QC RPD										Duplicates	T	---	---	---	7%	---	5%	---	2%	---	---	---	3%	---	2%	3%	3%	---	---	---	2%	---	9%	6%	0%	---
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	27-Sep-11	D	3.0 J	0.058	1.2	112	<0.0050	89.3	<0.0050	227,000	<0.50	0.194	<0.50	<3.0	<0.050	15.6	88,600	1,350	4.45	0.43	<0.20	115,000	<0.0020	<0.20	2.83	0.306	4.9
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	3-Nov-11	D	2,000	<0.50	<2.0	174	<0.50	<10	<0.050	290,000	<3.0	1.29	2.56	1,990	0.76	<20	127,000	1,210	11.6	<2.5	<2.0	140,000	<0.050	76	4.46	7.78	6.8
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	5-Dec-11	D	<6.0	0.064	2.2	79.6	<0.010	405	<0.010	304,000	<1.0	1.19	<1.0	<30	<0.10	23.5	197,000	2,530	2.91	1.01	<0.40	575,000	0.0048	<0.40	3.4	0.32	14.9
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	127	<0.50	<100	<0.050	296,000	<0.50	0.21	<0.50	<10	<0.30	<20	120,000	1,570	<2.0	0.55	<2.0	146,000	<0.050	<5.0	2.32	<0.50	37.3
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Feb-12	D	<15	0.066	0.62	92.8	<0.025	167	<0.025	296,000	<2.5	0.50	<2.5	<30	<0.25	14.0	123,000	1,580	1.96	1.1	<1.0	260,000	<0.010	<1.0	2.56	0.27	35
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	26-Mar-12	D	<6.0	0.039	1.27	191	<0.010	124	<0.010	343,000	<1.0	0.80	<1.0	<30	<0.10	14.7	145,000	2,460	1.53	0.65	<0.40	223,000	<0.0040	<0.40	3.29	0.12	<6.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Apr-12	D	<6.0	0.061	1.58	290	<0.010	129	<0.010	386,000	<1.0	0.57	<1.0	1,820	<0.10	14.8	163,000	2,770	1.24	2.38	<0.40	281,000	<0.0040	<0.40	3.39	0.23	10.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-May-12	D	<6.0	0.090	2.22	246	<0.010	90	0.011	360,000	<1.0	0.50	<1.0	527	<0.10	13.0	132,000	1,890	1.48	2.97	1.12	166,000	0.0067	<0.40	2.75	0.92	8.7
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jun-12	D	4.0	0.042	1.65	296	<0.0050	107	0.0068	347,000	<0.50	0.226	<0.20	1,810	<0.050	13.3	132,000	2,440	0.834	0.46	<0.20	196,000	<0.0020	0.22	2.89	0.236	5.5
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Jul-12	D	3.5	0.032	2.29	313	<0.0050	141	0.0206	355,000	<0.50	0.190	0.31	2,100	0.670	13.4	144,000	2,310	0.699	0.62	0.88	270,000	<0.0020	0.23	2.36	0.374	5.7
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	1-Aug-12	D	3.9	0.044	2.04	375	<0.010	170	0.016	366,000	<1.0	0.29	<0.40	2,020	<0.10	13.5	152,000	2,540	0.78	7.31	<0.40	329,000	<0.0040	<0.40	2.33	0.34	11.4
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Oct-12	---													Well Not Sampled												
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-12	D	<5.0	<0.50	<3.0	173	<0.50	1,850	<0.050	396,000	<0.50	3.48	0.69	622	<0.30	65	529,000	4,610	4.6	2.92	<2.0	4,230,000	<0.050	<5.0	3.32	1.88	8.6
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Nov-12	D	<5.0	<0.50	<2.0	71.5	<0.50	560	<0.050	478,000	<0.50	0.616	<0.50	2,020	<0.30	34	292,000	4,420	<2.0	1.91	<2.0	1,240,000	<0.050	<5.0	3.05	<0.50	5.9
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Dec-12	D	5.9	<0.50	2.3	29.4	<0.50	590	<0.050	428,000	<0.50	1.18	1.53	1,630	<0.30	26	215,000	3,650	2.3	1.26	<2.0	979,000	<0.050	<5.0	2.72	<0.50	14.4
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Jan-13	D	835	0.073	2.52	155	0.0362	181	0.0227	535,000	0.56	0.898	2.50	4,510	1.63	23.8	203,000	3,790	0.725	1.02	<0.20	380,000	0.0092	12.4	3.56	4.24	9.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	25-Feb-13	---													Well Not Sampled												
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	13-Mar-13	D	3.9	0.060	2.36	237	<0.0050	135	0.0121	548,000	<0.50	0.292	0.21	2,860	<0.050	17.3	211,000	5,030	0.681	1.20	0.28	479,000	<0.0020	0.61	2.66	0.304	2.9
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Jun-13	D	4.7	0.145	2.10	392	<0.0050	161	0.0247	508,000	<0.50	0.177	0.52	2,090	0.061	16.9	176,000	3,680	0.559	22.2	<0.20	328,000	<0.0020	0.32	2.02	0.651	7.3
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Jun-13	T	418	0.267	2.52	381	0.0122	172	0.0358	515,000	0.70	0.400	2.25	2,920	0.788	19.4	180,000	3,760	0.694	28.6	<0.20	310,000	0.0037	17.4	1.61	2.31	15.1
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	16-Sep-13	D	<5.0	<0.50	<2.0	587	<0.50	240	<0.050	513,000	<0.50	0.268	<0.50	2,430	<0.30	<20	180,000	4,550	<2.0	7.59	<2.0	483,000	<0.050	<5.0	1.88	<0.50	5.9
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	16-Sep-13	T	40.9	<0.50	<2.0	613	<0.50	280	<0.050	517,000	<0.50	0.155	0.55	2,890	<0.30	<20	185,000	4,690	<2.0	0.97 J+	<2.0	529,000	<0.050	<5.0	2.08	<0.50	<3.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Dec-13	D	<2.0	0.067	1.18	758	<0.010	177	0.013	595,000	<1.0	0.23	<0.40	2,880	<0.10	12.7	224,000	5,040	0.46	1.37	<0.40	594,000	<0.0040	<0.40	2.54	0.25	4.3
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	9-Dec-13	T	39.3	0.109 J+	1.39	760	<0.010	188	0.013	564,000	<1.0	0.22	<1.0	3,020	0.12	12.1	207,000	5,110	0.54	1.31	<0.40	546,000	<0.0040	2.86	2.49	0.48	<6.0

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Mar-14	D	<2.0	0.068	0.93	589	<0.010	121	0.020	541,000	<1.0	0.21	<0.40	2,610	<0.10	9.61	196,000	4,420	0.43	0.96	<0.40	433,000	<0.0040	<0.40	2.15	0.20	3.3
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	10-Mar-14	T	1,360	0.244	3.09	640	0.040	134	0.069	530,000	2.7	0.74	5.2	7,650	7.60	10.4	190,000	4,620	0.62	4.83	<0.40	416,000	<0.0080	50.4	2.28	6.93	16.8
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Jun-14	D	4.1	0.149	1.70	577	<0.0050	148	0.0101	547,000	<0.50	0.148	0.35	1,360	<0.050	14.0	188,000	3,050	0.416	8.54	<0.20	398,000	<0.0020	0.28	1.35	0.744	4.6
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Jun-14	T	10,300	0.434	6.30	790	0.332	157	0.310	648,000	11.9	3.82	13.4	21,600	24.6	46.5	181,000	3,260	1.91	13.4	<0.20	387,000	0.0341	171	3.35	34.2	114
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-14	D	<2.0	0.057	1.46	664	<0.010	204	<0.010	463,000	<1.0	<0.10	<0.40	2,790	<0.10	13.0	161,000	3,930	0.40	1.69	<0.40	587,000	<0.0040	<0.40	1.69	0.26	<2.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	11-Sep-14	T	2,500	0.264	3.14	715	0.071	214	0.085	492,000	3.2	1.20	5.1	9,550	4.85	22.3	161,000	4,460	1.05	9.59	<0.40	544,000	0.0139	89.0	1.97	10.8	29.5
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	4-Dec-14	D	<2.0	0.056	0.98	694	<0.010	163	<0.010	525,000	<1.0	<0.10	<0.40	3,000	<0.10	7.33	193,000	5,440	0.41	0.60	<0.40	555,000	<0.0040	<0.40	2.25	0.14	2.8
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	2-Dec-14	T	2,100	0.278	4.42	862	0.140	174	0.0767	581,000	3.62	0.826	3.19	13,300	9.31	13.1	174,000	4,510	1.08	6.60	<0.20	506,000	<0.010	43.6	3.30	13.6	35.2
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-15	D	1.3	0.137	1.45	654	<0.0050	132	<0.0050	515,000	<0.50	0.065	0.36	3,110	<0.050	5.73	167,000	3,550	2.57	0.77	<0.20	519,000	<0.0020	0.24	2.48	0.370	5.6
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-15	T	15,000	0.357	6.97	863	0.706	132	0.521	1,020,000	17.8	6.92	11.4	59,600	49.9	53.0	174,000	4,460	1.69	20.7	2.05	506,000	0.0689	203	5.55	89.7	249
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Jun-15	D	3.3	0.142	2.50	678	<0.010	206	<0.010	419,000	<1.0	<0.10	<0.40	2,350	<0.10	8.43	140,000	3,640	0.56	<0.40	<0.40	609,000	<0.0040	0.46	1.90	0.96	<2.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Jun-15	T	5,290	0.281	5.17	761	0.227	209	0.205	491,000	10.6	2.74	12.1	14,700	25.0	21.5	137,000	3,580	1.14	8.50	<0.40	574,000	0.022	143	3.18	26.3	65.8
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-15	D	2.6	0.058	1.92	661	<0.010	214	0.017	513,000	<1.0	0.10	<0.40	2,890	<0.10	7.67	191,000	6,420	0.53	1.10	<0.40	808,000	<0.0040	0.41	1.94	0.37	7.1
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-15	T	1,020	0.285	3.45	633	0.043	197	0.079	506,000	4.5	0.86	7.4	5,900	4.92	9.05	183,000	5,900	1.24	3.86	<0.40	740,000	<0.010	56.5	2.08	6.97	26.5
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-Dec-15	D	<2.0	0.174	1.89	719	<0.010	219	<0.010	575,000	<1.0	0.16	<0.40	1,890	<0.10	4.65	209,000	6,440	1.23	0.98	0.41	722,000	<0.0040	<0.40	2.66	0.60	20.1
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	7-Dec-15	T	7,790	0.494	6.62	872	0.340	213	0.442	710,000	13.3	3.75	15.5	23,600	13.1	12.7	226,000	8,180	3.17	12.1	0.43	803,000	0.024	180	2.56	46.1	140
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	D	<2.0	0.041	0.92	658	<0.010	174	0.029	615,000	<1.0	0.28	<0.40	2,310	<0.10	6.97	224,000	6,450	0.41	0.59	<0.40	727,000	<0.0040	<0.40	1.81	0.17	4.6
DUP-2 (P8-7.5S)	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	D	<2.0	0.035	1.04	679	<0.010	189	<0.010	619,000	<1.0	0.25	<0.40	2,370	<0.10	6.40	225,000	6,560	0.41	0.46	<0.40	719,000	<0.0040	<0.40	1.73	0.15	<2.0
QA/QC RPD										Duplicates	D	---	---	12%	3%	---	8%	---	1%	---	---	---	3%	---	9%	0%	2%	0%	---	---	1%	---	---	5%	---	---
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	T	303	0.113	1.52	569	<0.010	170	0.019	537,000	2.0	0.43	2.6	2,680	1.11	7.59	201,000	5,200	0.81	2.00	<0.40	696,000	<0.010	15.4	1.52	1.50	7.2
DUP-2 (P8-7.5S)	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	29-Feb-16	T	526	0.128	1.77	642	0.025	212	0.029	576,000	2.3	0.58	2.8	3,410	4.40	8.15	212,000	5,610	0.97	2.42	<0.40	716,000	<0.010	22.0	1.63	2.62	9.8
QA/QC RPD										Duplicates	T	54%	---	15%	12%	---	22%	---	7%	---	30%	7%	24%	119%	7%	5%	8%	18%	19%	---	3%	---	35%	7%	54%	---
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-May-16	D	<2.0	0.323	5.78	879	<0.010	202	<0.010	656,000	<1.0	0.33	0.57	2,260	<0.10	8.91	237,000	6,640	5.64	2.80	<0.40	837,000	<0.0040	0.41	3.10	2.13	9.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	17-May-16	T	49.3	0.356	4.31	859	<0.010	205	<0.010	664,000	<1.0	0.36	<1.0	2,210	0.12	8.91	239,000	6,960	4.45	3.19	<0.40	826,000	<0.010	2.53	2.84	1.85	7.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Aug-16	D	<5.0	<0.50	2.4	1,010	<0.50	380	<0.050	712,000	<0.50	0.144	1.00	3,930	<0.30	<20	272,000	6,540	<2.0	0.76	<2.0	1,360,000	<0.050	<5.0	2.01	0.73	<3.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	15-Aug-16	T	5,530	0.92	11.0	1,150	<0.50	440	0.294	732,000	33.7	5.86	61.5	22,700	16.6	<20	259,000	7,230	6.7	29.5	<2.0	1,180,000	<0.050	154	3.23	33.4	152.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	23-Nov-16	D	<2.0	0.032	1.13	631	<0.010	182	0.015	631,000	<1.0	0.10	<0.40	3,150	<0.10	6.92	213,000	5,390	0.70	0.58	<0.40	845,000	<0.0040	<0.40	1.68	0.16	<2.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	23-Nov-16	T	228	0.090	1.62	620	<0.010	192	0.020	560,000	<1.0	0.30	1.6	3,440	0.94	7.03	196,000	5,470	0.97	1.28	<0.40	817,000	<0.010	9.24	1.92	1.19	6.1
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-17	D	8.8	0.074	1.21	562	<0.010	151	0.019	508,000	<1.0	0.20	<0.40	1,970	0.14	4.69	167,000	4,230	0.34	0.58	<0.40	757,000	<0.0040	<0.40	1.57	0.24	2.0
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-17	T	26,200	1.56	29.9	1,980	1.47	170	0.876	1,130,000	65.1	23.8	143	84,400	83.2	40.0	206,000	9,220	8.4	70.0	<2.0	724,000	0.240	764	4.45	151	479
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Jun-17	D	<2.0	0.075	1.65	476	<0.010	176	0.010	482,000	<1.0	0.11	<0.40	2,030	<0.10	5.22	150,000	4,220	0.59	0.43	0.44	766,000	<0.0040	<0.40	1.52	0.25	3.3
P8-7.5S	Porewater EAZ	P8-7.5	DS	EB	0.8-1.0	0.8	1.0	Colluvium	---	6-Jun-17	T	1,550	0.253	4.13	480	0.059	173	0.097	481,000	4.6	1.58	9.4	8,970	4.77	7.43	146,000	3,640	1.18	4.46	<0.40	758,000	0.015	67.4	1.59	7.06	34.9
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Sep-11	D	5.0 J	0.216	1.43	78.7	<0.0050	73.8	<0.010	95,900	<0.50	0.996	<0.50	<3.0	<0.050	37.3	28,100	657	15	1.98	0.73	139,000	0.0447	<0.20	3.85	0.289	9.6
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Nov-11	D	5.8	<0.50	<2.0	97.9	<0.50	<10	0.108	121,000	<0.50	0.422	0.73	<10	<0.30	29	35,100	730	10.9	4.05 J+	<2.0	125,000	<0.050	<5.0	3.52	<0.50	36.5
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	D	<5.0	<0.50	<2.0	146	<0.50	<100	<0.050	174,000	<0.50	0.888	<0.50	<30	<0.30	25	50,200	1,150	4.8	1.34	<2.0	104,000	<0.050	<5.0	1.95	<0.50	24.6
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	168	<0.50	<100	<0.050	199,000	<0.50	0.581	<0.50	<10	<0.30	25	61,200	1,170	4.5	1.22	<2.0	107,000	<0.050	<5.0	1.67	<0.50	42.9
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	D	<15	0.085	0.59	196	<0.025	75	0.031	220,000	<2.5	0.52	<2.5	<30	<0.25	19.7	64,700	1,360	3.96	1.6	<1.0	104,000	0.020	<1.0	1.74	<0.25	59
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	D	<6.0	0.042	0.51	259	<0.010	75	<0.010	296,000	<1.0	0.94	<1.0	<30	<0.10	20.1	89,900	2,050	2.43	1.31	<0.40	89,600	0.0142	<0.40	1.51	<0.10	21.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Apr-12	D	<6.0	0.071	0.40	247	<0.010	72	0.013	292,000	<1.0	0.99	<1.0	91	<0.10	18.3	88,200	1,860	2.64	1.77	<0.40	99,500	0.0194	<0.40	1.56	<0.10	42.4
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-May-12	D	<6.0	0.045	0.90	292	<0.010	67	0.014	336,000	<1.0	1.05	<1.0	887	<0.10	18.6	102,000	2,050	2.23	1.35	0.49	99,600	0.0115	<0.40	1.45	<0.10	16.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jun-12	D	1.5	0.032	0.707	346	<0.0050	126	0.0073	390,000	<0.50	1.35	<0.20	153	<0.050	19.1	133,000	2,500	1.76	1.52	<0.20	258,000	0.0197	<0.20	1.39	<0.050	6.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jul-12	D	<5.0	<0.50	<2.0	284	<0.50	1,330	0.219	346,000	<0.50	1.46	0.85	40	<0.30	62	375,000	1,860	4.6	2.13	<2.0	2,780,000	0.067	<5.0	1.78	<0.50	6.3
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Aug-12	D	2.6	0.046	0.64	261	<0.010	422	0.055	354,000	<1.0	1.66	0.45	65	<0.10	30.4	198,000	2,060	2.69	2.05	<0.40	1,010,000	0.0167	<0.40	1.35	<0.10	6.9
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	D	<5.0	<0.50	<2.0	381	<0.50	420	<0.050	400,000	<0.50	1.76	0.65	195	<0.30	30	190,000	2,800	2.5	2.50	<2.0	813,000	<0.050	<5.0	1.55	<0.50	6.5
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Oct-12	D	<2.0	0.050	0.69	359	<0.010	227	0.033	423,000	<1.0	1.73	<0.40	554	<0.10	19.4	164,000	2,570	1.88	2.89	<0.40	444,000	0.0068	<0.40	1.20	0.15	9.8
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	D	1.1	0.044	0.543	275	<0.0050	116	0.0271	363,000	<0.50	1.02	0.31	232	<0.050	23.8	121,000	2,350	1.70	1.79	<0.20	230,000	0.0080	<0.20	1.27	0.126	7.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	D	<2.0	0.040	0.51	261	<0.010	119	<0.010	347,000	<1.0	0.62	<0.40	122	<0.10	21.1	109,000	2,130	1.58	1.13	<0.40	143,000	0.0068	<0.40	1.47	<0.10	7.7
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	D	<1.0	0.051	0.627	306	<0.0050	103	<0.0050	372,000	0.80	0.536	0.47	132	<0.050	21.6	114,000	2,160	1.47	4.95	<0.20	135,000	0.0055	<0.20	1.72	<0.050	7.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-13	D	<1.0	0.051	0.778	269	<0.0050	90.4	0.0064	372,000	<0.50	0.508	0.40	1,210	<0.050	19.8	102,000	2,910	1.65	5.61	<0.20	149,000	0.0032	0.20	1.46	<0.050	6.3
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Jun-13	D	1.7	0.059	1.91	483	<0.0050	99.2	0.0097	534,000	<0.50	0.846	<0.20	3,240	<0.050	18.9	165,000	3,530	0.925	1.02	<0.20	151,000	<0.0020	<0.20	1.55	0.072	2.2
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	16-Sep-13	D	2.2	0.047	1.19	626	<0.0050	109	0.0123	544,000	<0.50	0.850	<0.20	2,960	<0.050	17.9	163,000	3,170	0.738	0.94	<0.20	180,000	<0.0020	<0.20	1.32	0.099	2.2
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-13	D	3.2	0.200	1.09	504	<0.0050	123	0.0766	480,000	<0.50	0.794	0.66	229	0.086	25.7	153,000	2,620	1.08	7.92	<0.20	176,000	0.0112	<0.20	1.48	0.159	39.6
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	D	1.0	0.113	0.572	563	<0.0050	81.9	0.0255	542,000	<0.50	0.535	0.61	1,340	<0.050	13.8	178,000	3,920	0.649	1.41	<0.20	210,000	0.0061	<0.20	1.27	0.168	6.3
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-14	D	2.4	0.050	0.953	659	<0.0050	104	0.0053	588,000	<0.50	0.504	0.36	2,930	<0.050	16.8	184,000	3,740	0.580	0.88	<0.20	258,000	0.0028	<0.20	1.41	<0.050	2.5
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	D	<2.0	0.055	1.26	700	<0.010	112	<0.010 UJ	554,000	<1.0	0.73	<0.40	3,220	<0.10	13.6	173,000	3,550	0.52	1.42	<0.40	273,000	<0.0040	<0.40	1.21	<0.10	<2.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Dec-14	D	<1.0	0.040	0.441	562	<0.0050	113	<0.0050	473,000	<0.50	0.366	0.21	397	<0.050	15.0	144,000	3,270	0.525	1.41	<0.20	246,000	0.0028	<0.20	1.54	<0.050	2.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Mar-15	D	2.7	0.058	0.27	524	<0.010	121	0.057	475,000	<1.0	0.42	1.00	97	<0.10	10.5	141,000	4,010	0.43	1.07	<0.40	283,000	<0.0040	<0.40	1.16	<0.10	7.4
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	D	<2.0	0.070	1.20	655	<0.010	117	0.012	488,000	<1.0	0.45	<0.40	3,040	<0.10	9.49	142,000	3,650	0.37	0.81	<0.40	312,000	<0.0040	<0.40	1.01	<0.10	7.2
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Sep-15	D	2.5	0.033	1.42	564	0.0052	111	0.0129	479,000	<0.50	0.463	0.23	3,550	<0.050	11.4	142,000	3,420	0.455	0.86	<0.20	330,000	<0.0020	<0.20	1.11	0.061	2.2
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Dec-15	D	1.4	0.070	0.642	626	<0.0050	112	0.0080	554,000	<0.50	0.354	0.32	2,120	<0.050	6.37	169,000	4,360	0.465	0.79	0.22	385,000	0.0029	0.21	1.25	0.079	4.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	D	<2.0	0.263	0.41	556	<0.010	106	0.049	498,000	<1.0	0.43	0.78	140	<0.10	11.5	156,000	2,780	0.69	1.29	<0.40	331,000	0.0108	<0.40	1.24	0.31	28.9
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-May-16	D	<2.0	0.073	0.74	1,020	<0.010	135	0.023	779,000	<1.0	0.52	<0.40	3,850	<0.10	9.39	247,000	6,570	0.34	1.00	<0.40	608,000	<0.0040	<0.40	1.01	<0.10	6.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Aug-16	D	5.4	0.166	0.73	786	<0.010	137	0.017	701,000	<1.0	0.55	0.67	2,220	<0.10	9.73	217,000	4,910	0.41	1.17	<0.40	532,000	0.0116	<0.40	0.940	<0.10	6.1
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	22-Nov-16	D	<2.0	0.102	0.50	694	<0.010	140	<0.010	600,000	<1.0	0.39	<0.40	2,140	<0.10	11.2	189,000	4,070	0.38	0.85	<0.40	550,000	0.0053	<0.40	0.922	<0.10	4.0
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	14-Mar-17	D	<2.0	0.091	0.22	647	<0.010	111	0.023	567,000	<1.0	0.46	<0.40	417	<0.10	9.60	168,000	3,850	0.56	1.12	<0.40	513,000	0.0074	<0.40	1.15	0.10	4.5
P8-7.5I	Porewater	P8-7.5	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	D	<2.0	0.023	0.34	584	<0.010	136	<0.010	546,000	<1.0	0.35	2.38	220	<0.10	7.47	163,000	4,580	0.29	0.60	1.21	605,000	<0.0040	<0.40	0.988	<0.10	2.2
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	27-Sep-11	D	5.4 J	0.183	0.636	73.1	<0.0050	97.9	<0.010	97,600	<0.50	0.321	<0.50	<3.0	<0.050	5.68	32,000	976	17.1	1.18	<0.20	42,400	0.0041	<0.20	0.183	0.123	9.9
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	3-Nov-11	D	8.2	<0.50	<2.0	78.1	<0.50	110	<0.050	113,000	<0.50	0.371	<0.50	<10	<0.30	<20	35,700	1,380	10.4	<1.0	<2.0	37,200	<0.050	<5.0	0.208	<0.50	<3.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	D	1,010 J	<0.50 UJ	<2.0 UJ	85.6	<0.50	100	<0.050 UJ	114,000	1.09 J	0.764 J	0.87 J	650 J	<0.30	<20 UJ	34,900	1,390	9.1	1.59	<2.0	35,000	<0.050 UJ	17.1 J	0.252	1.84 J	9.6
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	D	<5.0	<0.50	<2.0	79.5	<0.50	110	<0.050	116,000	<0.50	0.552	<0.50	<10	<0.30	<20	37,500	1,380	8.5	1.07	<2.0	33,600	<0.050	<5.0	0.26	<0.50	7.5
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	D	<6.0	0.067	0.40	78.1	<0.010	82	<0.010	118,000	<1.0	0.63	<1.0	<30	<0.10	1.93	36,500	1,360	9.41	1.43	<0.40	32,800	0.0140	<0.40	0.352	0.22	15.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	D	64.5	0.025	0.320	76.0	<0.0050	95.9	<0.0050	123,000	<0.50	0.408	<0.50	376	<0.050	2.68	38,500	1,310	1.86	0.52	<0.20	37,100	0.0056	2.16	0.143	0.347	50.8
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	D	<3.0	0.020	0.264	74.4	<0.0050	91.2	<0.0050	123,000	<0.50	0.374	<0.50	254	<0.050	2.18	39,300	1,270	1.84	0.51	<0.20	34,900	0.0023	<0.20	0.149	0.075	23.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-May-12	D	<3.0	0.020	0.577	79.7	<0.0050	77.3	0.0078	134,000	<0.50	0.302	<0.50	1,540	<0.050	1.60	41,600	1,210	1.21	0.72	<0.20	31,400	0.0033	<0.20	0.142	0.074	32.3
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	D	1.6	0.019 J	0.497	80.2	<0.0050	82.1	<0.0050	138,000	<0.50	0.350	<0.20	1,190	<0.050	2.12	42,700	1,320	1.73	0.92	<0.20	34,800	0.0022	<0.20	0.155	0.065	9.4
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	D	<5.0 UJ	<0.50 UJ	<2.0 UJ	77.4	<0.50	<100	<0.050 UJ	133,000	<0.50	0.370	<0.50 UJ	1,380	<0.30 UJ	<20 UJ	43,400	1,240	<2.0 UJ	0.95	<2.0	36,800	<0.050	<5.0	0.145	<0.50 UJ	9.7
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	D	1.8	<0.010	0.745	91.8	<0.0050	92.7	<0.0050	143,000	<0.50	0.403	<0.20	1,970	<0.050	2.02	46,200	1,390	1.64	0.35	<0.20	33,300	<0.0020	<0.20	0.154	0.066	1.2
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	D	<5.0	<0.50	<2.0	164	<0.50	2,880	<0.050	322,000	<0.50	0.819	2.33 J	243	<0.30	111	769,000	1,370	8.8	1.55 J	<2.0	6,330,000	0.055	<5.0	2.01	0.92	8.5
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	D	2.1	0.039	0.85	174	<0.010	427	<0.010	230,000	<1.0	0.40	<0.40	957	<0.10	15.6	142,000	1,750	2.76	0.81	<0.40	773,000	<0.0040	<0.40	0.391	0.14	7.5
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	D	<1.0	0.076	0.399	132	<0.0050	221	0.0142 J	212,000	<0.50	0.434	<0.20 UJ	83	<0.050	7.86	95,200	2,050	1.48	5.58	<0.20	352,000	<0.0020	<0.20	0.226	0.104	13.6
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12	D	<1.0	0.105	0.553	94.8	<0.0050	182	0.0414	177,000	<0.50	0.261	<0.20 UJ	194	<0.050	4.65	71,700	1,210	1.20	2.34	<0.20	166,000	<0.0020	<0.20	0.181	0.086	6.9
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	D	<1.0	0.046	1.13	82.3	<0.0050	174	<0.0050	159,000	<0.50	0.393	0.26 J	659	<0.050	4.97	57,100	880	1.71	1.27	<0.20	112,000	<0.0020	<0.20	0.247	0.144	5.1 J
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	25-Feb-13	---	Well Not Sampled																								
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13	D	1.2	0.030	0.534	64.3	<0.0050	101	0.0212 J	149,000	<0.50	0.285	0.24 J	174	<0.050	3.53	37,900	737	2.04	1.71	<0.20	59,200	0.0037	<0.20	0.192	0.215	2.9 J
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	D	<1.0 UJ	0.019	1.52 J	86.2	<0.0050	107	0.0078	169,000	<0.50	0.582	<0.20	1,610	<0.050	2.49	52,700	1,410	0.939	0.70 J	<0.20	42,800	<0.0020	<0.20	0.136	0.091	2.3 J
P8-7.5D-A @	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-13	D	1.4	0.012	0.566	70.5	<0.0050	117	<0.0050	139,000	<0.50	0.281	<0.20	1,400	<0.050	2.52	47,400	1,060	0.874	0.28	<0.20	62,100	<0.0020	<0.20	0.0853	0.053	1.7
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	D	<5.0 UJ	<0.50 UJ	<2.0 UJ	133	<0.50	310	<0.050 UJ	199,000	<0.50	0.762	<0.50 UJ	1,960	<0.30	<20 UJ	90,500	1,980	<2.0 UJ	0.63	<2.0	323,000	<0.050	<5.0	0.238	<0.50 UJ	<3.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Dec-13	D	<1.0 UJ	0.047	0.388 J	124	<0.0050	134 J	0.0117 J	237,000	<0.50	0.413	0.27 J	99	<0.050	2.77	75,700	1,580	0.914	0.89	<0.20	58,900	0.0024 J	<0.20	0.131	0.063	3.7 J
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14	D	<1.0 UJ	0.077	0.324	102	<0.0050	102	0.0125 J	213,000	<0.50	0.534	0.36 J	147	<0.050	2.01	72,400	1,650	0.930	0.84	<0.20	44,900	0.0026 J	<0.20	0.124	0.063 J	3.4 J
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Jun-14	D	1.2	0.032	0.974	118	<0.0050	103	<0.0050	203,000	<0.50	0.548	0.71	2,190	<0.050	1.61	62,200	1,750	0.595	0.99	<0.20	38,500	0.0027	<0.20	0.106	0.062	5.1
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14	D	1.3 J	0.031	1.56	170	<0.0050	103	<0.0050	220,000	<0.50	0.932	<0.20	4,880	<0.050	1.72	68,300	2,250	0.486	0.85 J	<0.20	40,100	<0.0020	<0.20	0.101	0.089	1.8 J
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14	D	<1.0	0.060	0.423	132	<0.0050	107	0.0142 J	218,000	<0.50	0.671	0.39 J	493	<0.050	1.63	68,500	2,070	0.534	1.45	<0.20	41,600	0.0027	<0.20	0.0872	0.091	5.3
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	D	<1.0	0.066	0.305	122	<0.0050	103	0.0324	231,000	<0.50	0.554	0.29	172	<0.050	1.51	68,300	2,120	1.34	1.01	<0.20	43,700	0.0053	<0.20	0.133	0.116	1.8
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Mar-15	D	1.7	0.071	0.268	122	<0.0050	104	0.0365	232,000	<0.50	0.547	0.84	146	<0.050	1.48	69,800	2,110	1.34	1.13	<0.20	43,900	0.0051	<0.20	0.135	0.116	4.40
QA/QC RPD										Duplicates	D	---	7%	13%	0%	---	1%	12%	0%	---	1%	---	16%	---	2%	2%	0%	0%	11%	---	0%	---	---	1%	---	---
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Jun-15	D	4.5	0.029	0.500	131	<0.0050	104	0.0099	225,000	<0.50	0.460	<0.20	836	<0.050	1.64	67,500	1,860	0.707	0.67	<0.20	41,100	0.0026	0.22	0.103	0.103	1.1
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	15-Jun-15	D	<1.0	0.037	0.513	129	<0.0050	106	0.0123	221,000	<0.50	0.428	<0.20	714	<0.050	1.51	66,400	1,870	0.687	0.63	<0.20	39,800	0.0025	<0.20	0.100	0.077	1.2 Table 10
QA/QC RPD										Duplicates	D	---	---	3%	2%	---	2%	---	2%	---	7%	---	16%	---	8%	2%	1%	3%	---	---	3%	---	---	3%	---	---
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Sep-15	D	<1.0	0.021	1.14	163	<0.0050	110	<0.0050	289,000	<0.50	0.510	<0.20	2,790	<0.050	1.91	88,100	2,350	0.573	0.57	<0.20	57,300	0.0022	<0.20	0.0932	0.063	<1.0
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	8-Sep-15	D	<1.0	0.024	1.08	157	<0.0050	110	<0.0050	287,000	<0.50	0.494	<0.20	2,680	<0.050	1.88	86,400	2,250	0.569	0.62	<0.20	56,500	0.0024	<0.20	0.0939	0.056	1.1
QA/QC RPD										Duplicates	D	---	---	5%	4%	---	0%	---	1%	---	3%	---	4%	---	2%	2%	4%	1%	---	---	1%	---	---	1%	---	---
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Dec-15	D	<1.0	0.086	1.05	133	<0.0050	112	0.0089	241,000	<0.50	0.488	<0.20	1,700	<0.050	1.34	74,200	2,000	0.974	0.68	<0.20	54,500	<0.0020	<0.20	0.0719	0.081	2.7
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4	Colluvium	Till	7-Dec-15	D	<1.0	0.056	0.734	125	<0.0050	151	0.0206	239,000	<0.50	0.394	0.23	1,470	<0.050	2.67	74,300	1,870	0.841	0.65	<0.20	53,500	<0.0020	<0.20	0.0753	0.052	5.1
QA/QC RPD										Duplicates	D	---	42%	35%	6%	---	30%	---	1%	---	21%	---	15%	---	66%	0%	7%	15%	---	---	2%	---	---	5%	---	---
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	29-Feb-16	D	1.3	0.080	0.736	127	<0.0050	99.9	0.0208	229,000	<0.50	0.439	0.43	1,770	<0.050	1.55	70,800	1,590	0.520	0.80	<0.20	50,300	<0.0020	<0.20	0.0914	0.068	7.0
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	17-May-16	D	1.5	0.054	0.897	137	<0.0050	99.8	0.0111	232,000	<0.50	0.449	0.32	2,900	<0.050	1.47	72,300	2,180	0.287	0.67	<0.20	53,700	<0.0020	<0.20	0.0689	0.070	5.8
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	17-May-16	D	<1.0	0.027	0.842	134	<0.0050	105	0.0064	229,000	<0.50	0.398	<0.20	2,860	<0.050	1.37	72,800	1,950	0.295	0.52	<0.20	53,200	<0.0020	<0.20	0.0664	0.066	1.9
QA/QC RPD										Duplicates	D	---	---	6%	2%	---	5%	---	1%	---	12%	---	1%	---	7%	1%	11%	3%	---	---	1%	---	---	4%	---	---
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	15-Aug-16	D	1.6	0.050	0.747	141	<0.0050	109	<0.0050	245,000	<0.50	0.530	<0.20	2,110	<0.050	2.15	80,300	2,020	0.398	0.73	<0.20	87,800	0.0035	<0.20	0.0652	0.121	1.8
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	22-Nov-16	D	4.9	0.115	0.441	141	<0.0050	138	0.0076	256,000	<0.50	0.424	0.29	980	<0.050	3.14	89,300	2,060	0.389	0.61	<0.20	149,000	<0.0020	<0.20	0.0910	0.057	3.5
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	14-Mar-17	D	2.7	0.036	0.776	159	<0.0050	97.9	<0.0050	273,000	<0.50	0.240	<0.20	3,170	0.064	1.79	83,000	2,060	0.581	0.42	<0.20	78,000	<0.0020	<0.20	0.0563	<0.050	1.5
P8-7.5D	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	6-Jun-17	D	<1.0	0.026	0.414	118	<0.0050	83.4	0.0075	261,000	<0.50	0.228	0.98	1,610	<0.050	1.22	76,700	1,890	0.478	0.37	<0.20	68,700	<0.0020	<0.20	0.0528	<0.050	1.9
P8-12S	Porewater EAZ	P8-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	27-Sep-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12S	Porewater EAZ	P8-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	11-Sep-12	---	Well Not Found																								
P8-12S	Porewater EAZ	P8-12	DS	EB	0.2-0.4	0.2	0.4	Beach sand	---	10-Dec-12	---	Well Not Found - Assumed Destroyed																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	27-Sep-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	3-Nov-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	6-Oct-11	D	<5.0	<0.50	<2.0	61	<0.50	2,120	0.147	200,000	<0.50	0.058	3.38	<10	<0.30	69	516,000	5.27	11	135	<2.0	4,230,000	<0.050	<5.0	4.53	2.34	490
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	3-Nov-11	D	11.4	<0.50	<2.0	44.2	<0.50	2,310	0.204	215,000	<0.50	0.246	0.79	<20	0.39	81	601,000	15.4	9.3	163	<2.0	5,000,000	<0.050	8	3.46	1.86	776
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Dec-11	D	7.4	<0.50	<2.0	45.2	<0.50	2,160	0.124	207,000	1.36	0.483	5.63	<10	<0.30	77	573,000	27.2	9.2	182	<2.0	4,790,000	<0.050	<5.0	3.55	1.46	401
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	27-Mar-12	D	<5.0	<0.50	<2.0	36.3	<0.50	2,840	0.225	245,000	<0.50	0.296	3.89	<10	<0.30	94	681,000	53.6	8.2	57.7	<2.0	5,770,000	<0.050	<5.0	3.62	2.44	294
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	6-Jun-12	D	<5.0	<0.50	<2.0	59.8	<0.50	2,640	<0.050	233,000	0.61	3.62	1.60	700	<0.30	89	674,000	1,020	11.0	26.3	<2.0	5,020,000	<0.050	<5.0	4.59	1.74	8.6
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Sep-12	D	<5.0	<0.50	<2.0	59.0	<0.50	2,770	<0.050	255,000	<0.50	0.823	1.16	33	<0.30	99	782,000	244	10.9	22.9	<2.0	5,800,000	<0.050	<5.0	5.02	1.59	39.7
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Oct-12	---	Well Not Sampled																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	8-Nov-12	D	7.6	<0.50	<5.0	49.3	<0.50	3,220	0.066	302,000	<0.50	0.180	<0.50	217	<0.30	129	874,000	1,540	<2.0	4.66	<2.0	7,390,000	<0.050	<5.0	2.17	2.34	<3.0
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Dec-12	D	6.3	<0.50	<2.0	56.3	<0.50	2,700	<0.050	261,000	<0.50	0.897	5.72	211	<0.30	78	735,000	981	12.3	21.1	<2.0	5,950,000	<0.050	<5.0	3.72	0.74	12.2
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-13	D	<5.0	<0.50	<2.0	34.2	<0.50	2,750	0.072	245,000	<0.50	0.224	0.75	82	<0.30	91	706,000	200	8.2	15.6	<2.0	5,610,000	<0.050	<5.0	2.89	1.21	13.2
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	13-Jun-13	D	115	0.71	<9.0	60.8	<0.50	3,260	<0.050	209,000	<0.50	1.40	0.59	688	0.43	97	650,000	1,160	15.7	12.0	<2.0	4,710,000	<0.050	7.5	4.86	8.18	11.5
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Jun-13	T	8,750	0.62	<9.0	105	<0.50	3,050	0.338	482,000	8.09	5.89	16.8	12,700	20.2	121	678,000	1,170	8.6	22.6	<2.0	5,400,000	<0.050	222	5.32	39.3	188
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	20-Sep-13	D	<5.0	<0.50	<2.0	50.1	<0.50	2,670	0.101	255,000	<0.50	0.328	0.73	120	<0.30	85	722,000	447	6.6	5.60	<2.0	5,860,000	<0.050	<5.0	2.78	1.25	7.8
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	17-Sep-13	T	206	<0.50	<2.0	51.9	<0.50	3,310	<0.050	301,000	<0.50	0.197	1.44	350	0.31	108	813,000	199	6.3	3.26 J+	<2.0	6,000,000	<0.050	10.9	2.68	2.08	6.6
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	9-Dec-13	T	2,110	<0.50	2.1	73.0	<0.50	2,260	0.140	262,000	3.16	1.09	9.67	3,210	3.94	86	659,000	184	7.8	6.26	<2.0	5,220,000	<0.050	98.7	3.54	9.08	31.8
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-14	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Jun-14	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	18-Sep-14	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	1-Dec-14	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	12-Mar-15	---	Well Not Sampled - Insufficient Water for Analysis																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	18-Jun-15	D	<5.0	<0.50	<2.0	29.8	<0.50	2,230	<0.050	127,000	<0.50	0.113	1.22	20	<0.30	49	329,000	187	5.7	2.53	<2.0	3,470,000	<0.050	<5.0	2.69	1.54	9.9
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	18-Jun-15	T	599	<0.50	2.8	34.5	<0.50	2,210	<0.050	133,000	0.75	0.421	2.09	1,380	0.98	52	331,000	394	5.9	3.15	<2.0	3,480,000	<0.050	27.9	2.84	4.05	11.3
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-15	D	<5.0	<0.50	<2.0	38.1	<0.50	2,370	<0.050	152,000	<0.50	<0.050	1.11	<10	<0.30	64	420,000	18.1	6.1	1.60	<2.0	3,600,000	<0.050	<5.0	2.26	1.27	22.5
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	11-Sep-15	T	150	<0.50	<2.0	39.1	<0.50	2,270	<0.050	152,000	0.50	0.252	1.63	637	0.31	65	425,000	191	5.9	2.52	<2.0	3,610,000	<0.050	8.7	2.20	2.47	11.2
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-15	D	<5.0	<0.50	<2.0	18.0	<0.50	1,610	<0.050	142,000	<0.50	0.050	0.97	<10	<0.30	38	420,000	70.2	4.8	1.05	<2.0	3,630,000	<0.050	<5.0	0.842	0.51	36.0
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	7-Dec-15	T	21,700	<0.50	12.1	125	<0.50	1,870	0.523	433,000	23.2	11.4	47.6	42,900	31.8	65	484,000	1,100	10.1	30.1	<2.0	3,960,000	0.065	666	3.13	94.1	178
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	2-Mar-16	D	<5.0	<0.50	<2.0	22.5	<0.50	1,800	<0.050	100,000	<0.50	0.102	0.65	64	<0.30	44	284,000	98.3	7.3	1.62	<2.0	2,750,000	<0.050	<5.0	3.12	0.99	7.7
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	2-Mar-16	T	412	<0.50	<2.0	24.8	<0.50	1,810	<0.050	99,500	0.57	0.337	1.43	877	0.51	44	279,000	216	7.2	2.24	<2.0	2,710,000	<0.050	18.9	3.27	2.56	8.1
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	20-May-16	D	Dry - No Sample																								
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Aug-16	D	<5.0	<0.50	7.0	47.5	<0.50	2,840	<0.050	302,000	<0.50	0.070	<0.50	76	<0.30	116	861,000	3,470	<2.0	0.78	2.5	7,570,000	<0.050	<5.0	1.57	2.79	4.1
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	15-Aug-16	T	13,500	0.75	23.7	116	<0.50	2,740	0.792	602,000	11.9	11.2	24.9	23,000	18.0	125	829,000	3,910	11.8	19.5	<2.0	7,020,000	0.065	401	5.61	60.5	182
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	23-Nov-16	D	<5.0	<0.50	4.5	42.5	<0.50	2,660	0.058	203,000	<0.50	0.264	<0.50	1,270	<0.30	78	590,000	1,040	4.1	1.39	<2.0	4,710,000	<0.050	<5.0	1.19	0.75	5.7
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	23-Nov-16	T	44.5	<0.50	5.5	45.6	<0.50	2,580	0.104	210,000	<0.50	0.250	<0.50	1,720	<0.30	79	625,000	1,090	3.2	1.07	<2.0	4,770,000	<0.050	<5.0	1.22	1.07	4.5
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-17	D	6.7	<0.50	<2.0	13.7	<0.50	2,610	3.49	201,000	<0.50	<0.050	0.79	16	<0.30	93	641,000	6.77	5.6	0.55	<2.0	5,460,000	<0.050	<5.0	1.79	1.01	8.6
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	14-Mar-17	T	880	1.83	2.4	16.9	<0.50	2,560	3.91	213,000	1.65	0.523	3.36	1,560	1.41	107	696,000	61.5	5.6	1.84	<2.0	5,210,000	<0.050	44.4	1.74	3.96	14.9
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	6-Jun-17	D	<5.0	<0.50	<2.0	21.1	<0.50	2,720	1.30	234,000	<0.50	0.151	2.55	70	<0.30	107	705,000	114	6.2	1.47	<2.0	5,620,000	<0.050	<5.0	1.78	0.60	5.9
P8-12I	Porewater EAZ	P8-12	DS	EB	0.7-0.9	0.7	0.9	Beach sand	---	5-Jun-17	T	307	<0.50	<2.0	13.9	<0.50	2,600	3.62	232,000	<0.50	0.150	2.49	588	0.58	105	705,000	22.0	6.4	1.04	<2.0	6,280,000	<0.050	13.5	2.02	1.75	7.2
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	27-Sep-11	D	<6.0	0.049	1.96	14	<0.010	367	<0.010	41,600	<1.0	0.22	<1.0	<3.0	<0.10	11.7	80,100	316	1.2	1.02	<0.40	432,000	<0.0040	<0.40	1.08	0.58	<6.0
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	27-Mar-12	D	<6.0	0.039	0.97	13.3	<0.010	290	<0.010	57,900	<1.0	0.170	<1.0	<30	<0.10	11.7	110,000	468	0.77	1.62	<0.40	409,000	0.0047	<0.40	1.52	1.26	24.0
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	4-Jun-12	D	2.6	0.028	1.10	13.5	<0.010	250	<0.010	49,200	<1.0	<0.10	0.71	410	<0.10	10.3	85,000	311	0.68	0.52	<0.40	312,000	0.0070	<0.40	1.40	0.26	7.3
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-12	D	<2.0	0.121	1.20	15.6	<0.010	318	<0.010	52,900	<1.0	<0.10	0.46	220	<0.10	12.1	101,000	204	0.61	4.07	<0.40	381,000	<0.0040	<0.40	1.42	1.21	29.9
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Dec-12	D	<2.0	0.023	1.63	29.5	<0.010	253	<0.010	125,000	<1.0	0.11	0.49	955	<0.10	12.3	236,000	770	0.47	<0.40	<0.40	446,000	<0.0040	<0.40	1.73	0.27	<2.0
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-13	D	<1.0	0.125	0.947	32.9	<0.0050	306	0.148	141,000	<0.50	0.068	0.53	393	<0.050	20.1	258,000	469	0.910	1.96	0.26	618,000	<0.0020	0.30	1.71	0.558	12.4
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Jun-13	D	1.8	0.060	1.25	31.6	<0.0050	360	0.0164	171,000	<0.50	0.153	0.48	368	<0.050	23.2	273,000	480	0.637	0.48	<0.20	512,000	<0.0020	<0.20	2.37	0.759	4.2

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	16-Sep-13	D	<2.0	0.087	1.38	31.1	<0.010	344	0.012	132,000	<1.0	0.15	<0.40	332	<0.10	19.8	201,000	262	0.68	0.47	<0.40	425,000	<0.0040	<0.40	2.29	0.85	5.3
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	9-Dec-13	D	<2.0	0.053	1.27	25.2	<0.010	358	<0.010	159,000	<1.0	<0.10	<0.40	829	<0.10	23.3	264,000	592	0.65	<0.40	<0.40	734,000	<0.0040	<0.40	2.05	0.38	<2.0
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	D	<1.0	0.041	0.545	27.9	<0.0050	236	0.0071	188,000	<0.50	0.073	0.33	347	<0.050	20.2	291,000	223	0.434	0.24	<0.20	481,000	<0.0020	<0.20	2.33	0.252	4.2
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Jun-14	D	1.7	0.024	1.45	32.7	<0.0050	281	0.0059	147,000	<0.50	0.123	0.32	1,340	<0.050	20.2	214,000	849	0.437	0.27	<0.20	456,000	<0.0020	<0.20	2.13	0.238	2.0
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-14	D	1.0	0.060	0.917	23.2	<0.0050	325	0.0055	122,000	<0.50	<0.050	0.43	146	<0.050	23.4	178,000	222	0.670	0.33	<0.20	486,000	<0.0020	<0.20	2.47	0.732	2.9
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	2-Dec-14	D	<1.0	0.044	0.901	23.2	<0.0050	262	<0.0050	122,000	<0.50	<0.050	0.60	314	<0.050	15.1	174,000	237	0.400	0.33	<0.20	405,000	<0.0020	<0.20	2.47	0.481	5.7
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	12-Mar-15	D	1.3	0.043	1.19	33.7	<0.0050	204	<0.0050	156,000	<0.50	0.055	0.31	1,190	<0.050	10.6	212,000	764	0.376	0.24	<0.20	445,000	<0.0020	<0.20	2.33	0.269	2.3
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Jun-15	D	<1.0	0.053	1.81	31.7	<0.0050	248	0.0133	141,000	<0.50	0.057	0.28	1,580	<0.050	16.4	179,000	1,140	0.425	0.21	<0.20	415,000	<0.0020	<0.20	2.20	0.287	3.2
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	11-Sep-15	D	2.3	0.034	1.26	26.6	<0.0050	252	<0.0050	127,000	<0.50	0.088	0.28	900	<0.050	17.3	160,000	1,020	0.423	0.53	<0.20	438,000	<0.0020	<0.20	1.82	0.583	6.2
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	7-Dec-15	D	<1.0	0.093	0.576	24.7	<0.0050	233	0.0217	168,000	<0.50	0.055	0.60	215	<0.050	12.2	217,000	431	0.481	0.30	0.23	486,000	<0.0020	<0.20	1.33	0.401	13.4
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	29-Feb-16	D	<2.0	0.048	0.99	47.6	<0.010	194	0.027	248,000	<1.0	0.11	0.49	1,230	<0.10	17.5	303,000	2,090	0.43	<0.40	<0.40	527,000	<0.0040	<0.40	2.51	0.18	14.8
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	17-May-16	D	<1.0	0.115	0.786	34.6	<0.0050	207	0.0307	235,000	<0.50	0.078	0.54	885	<0.050	16.7	293,000	1,750	0.494	0.52	<0.20	561,000	<0.0020	<0.20	2.16	0.249	8.7
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	15-Aug-16	D	<2.0	0.149	1.21	37.8	<0.010	409	0.046	193,000	<1.0	0.21	<0.40	259	<0.10	21.9	248,000	1,430	0.86	0.45	<0.40	874,000	0.0046	<0.40	2.13	0.56	4.8
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	21-Nov-16	D	7.3	0.074	0.56	25.8	<0.010	234	0.268	181,000	<1.0	<0.10	0.48	240	<0.10	19.1	206,000	322	0.46	<0.40	<0.40	578,000	<0.0040	<0.40	2.01	0.43	3.1
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	14-Mar-17	D	9.0	0.083	0.39	35.1	<0.010	200	0.117	169,000	<1.0	<0.10	0.47	<30	0.12	14.1	187,000	386	0.41	<0.40	<0.40	503,000	<0.0040	<0.40	1.98	0.17	3.9
P8-12D	Porewater	P8-12	DS	EB	1.2-1.4	1.2	1.4	Beach sand	---	5-Jun-17	D	<5.0	<0.50	<2.0	28.3	<0.50	210	0.163	130,000	<0.50	0.070	1.05	26	<0.30	<20	147,000	1,520	<2.0	<0.50	<2.0	443,000	0.076	<5.0	1.73	<0.50	4.9
P9-3	Porewater EAZ	P9-3	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	6-Dec-11	D	<5.0	<0.50	<2.0	9.4	<0.50	<100	<0.050	63,600	<0.50	3.75	<0.50	2,130	<0.30	<20	19,400	4,230	<2.0	2.6	<2.0	50,900	<0.050	<5.0	0.18	<0.50	10.8
P9-3	Porewater EAZ	P9-3	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	4-Jan-12	D	5.5	<0.50	<2.0	6.6	<0.50	140	<0.050	48,400	<0.50	0.893	<0.50	399	<0.30	<20	19,900	2,070	<2.0	2.22	<2.0	126,000	<0.050	<5.0	0.171	<0.50	<3.0
P9-3	Porewater EAZ	P9-3	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	1-Feb-12	D	6.5	0.079	1.20	3.90	<0.010	101	<0.010	29,100	<1.0	0.27	<1.0	376	<0.10	6.91	15,400	811	0.68	0.63	<0.40	115,000	<0.0040	<0.40	0.165	0.37	<6.0
P9-3	Porewater EAZ	P9-3	OB	EB	0.2-0.6	0.2	0.6	Beach sand/OC	Weathered Colluvium	13-Mar-12	D	<5.0	<0.50	<2.0	55.6	<0.50	350	<0.050	162,000	<0.50	0.933	<0.50	716	<0.30	26	118,000	5,020	<2.0	0.65	<2.0	927,000	<0.050	<5.0	0.254	<0.50	3.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Apr-12	D	6.5	<0.50	3.7	282	<0.50	250	0.051	224,000	<0.50	2.00	0.80	24,400	<0.30	32	133,000	8,130	<2.0	2.21	<2.0	995,000	<0.050	<5.0	1.78	1.09	9.7
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-May-12	D	5.5	0.166	1.50	88.5	<0.0050	163	0.0091	83,800	<0.50	0.461	<0.50	4,500	<0.050	16.9	51,000	1,790	0.802	0.88	0.20	247,000	0.0030	0.23	0.587	0.670	12.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	5-Jun-12	D	8.1	<0.50	<2.0	261	<0.50	900	<0.050	190,000	<0.50	0.577	0.68	14,100	<0.30	37	194,000	3,410	<2.0	1.40	<2.0	2,110,000	<0.050	<5.0	1.68	1.18	8.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Jul-12	D	5.7	<0.50	<3.0	354	<0.50	810	0.058	228,000	<0.50	0.281	0.56	11,700	0.98	45	232,000	3,760	<2.0	1.94	<2.0	2,100,000	<0.050	<5.0	1.16	1.06	6.6
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Aug-12	D	6.3	<0.50	<3.0	574	<0.50	1,770	<0.050	410,000	<0.50	0.203	<0.50	16,100	<0.30	58	660,000	4,040	<2.0	2.29	<2.0	5,220,000	<0.050	<5.0	1.72	1.34	6.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Sep-12	---	Well Not Sampled																								
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Oct-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Nov-12	D	9.0 J	0.098	1.43	282	<0.0050	340	<0.0050	142,000	<0.50	0.239	<0.20	4,570	<0.050	22.4	105,000	2,100	0.139	0.28	0.24 J	349,000	<0.0020	0.72	0.149	1.35	1.4
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-12	D	6.0	0.065	1.33	132	<0.0050	270	<0.0050	107,000	<0.50	0.113	<0.20	3,200	<0.050	19.5	64,800	1,520	0.122	0.22	0.22	334,000	<0.0020	0.55	0.0971	1.25	1.3
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	8-Jan-13	D	4.7	0.078	0.91	139	<0.010	355	<0.010	123,000	<1.0	<0.10	<0.40	3,760	<0.10	22.4	80,300	1,850	<0.10	1.49	<0.40	572,000	<0.0040	<0.40	0.0874	0.86	3.7
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	25-Feb-13	---	Well Not Sampled																								
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Mar-13	D	5.9	0.044	0.535	41.9	<0.0050	104	<0.0050	62,700	<0.50	0.056	0.22	3,320	<0.050	14.0	29,600	1,260	0.084	1.40	<0.20	88,100	<0.0020	0.36	0.0343	0.702	3.6
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	D	9.0	<0.50	<2.0	390	<0.50	720	<0.050	275,000	<0.50	0.079	<0.50	3,330	<0.30	30	247,000	4,800	<2.0	1.40	<2.0	1,910,000	<0.050	<5.0	0.334	1.49	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	T	62.4	<0.50	<2.0	259	<0.50	560	<0.050	180,000	<0.50	0.185	2.85	3,310	0.78	22	157,000	3,110	<2.0	1.25	<2.0	1,290,000	<0.050	<5.0	0.228	2.15	10.8
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	D	14.8	1.17	9.2	542	<0.50	2,820	<0.050	418,000	<0.50	0.105	<0.50	31	<0.30	52	730,000	2,660	<2.0	<0.50	<2.0	6,340,000	<0.050	<5.0	0.367	1.93	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Sep-13	T	202	1.31	15.4	616	<0.50	2,530	<0.050	403,000	0.59	0.254	1.31	1,010	0.75	47	683,000	3,130	<2.0	0.95 J+	<2.0	5,830,000	<0.050	12.9	0.438	3.17	7.4
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	D	<5.0	<0.50	<2.0	84.4	<0.50	270	<0.050	187,000	<0.50	0.111	<0.50	410	<0.30	<20	125,000	3,930	<2.0	<0.50	<2.0	796,000	<0.050	<5.0	0.050	1.26	3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Dec-13	T	9.8	<0.50	<2.0	86.1	<0.50	280	<0.050	189,000	<0.50	<0.050	<0.50	753	<0.30	<20	125,000	4,030	<2.0	<0.50	<2.0	809,000	<0.050	<5.0	<0.050	1.37	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	D	6.7	0.029	0.495	18.9	<0.0050	205	<0.0050	44,400	<0.50	0.115	<0.20	31	<0.050	9.50	25,000	914	0.054	0.23	<0.20	287,000	<0.0020	0.69	0.0339	1.61	1.2
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Mar-14	T	25.8	0.049	0.536	15.8	<0.0050	200	0.0062	33,900	<0.50	0.075	<0.50	130	0.229	8.97	19,000	725	0.145	<0.20	<0.20	235,000	<0.0020	1.52	0.0435	1.89	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-14	D	7.9	0.033	0.622	26.5	0.0057	209	<0.0050	64,400	<0.50	0.055	<0.20	209	<0.050	13.3	30,100	1,500	0.121	0.24	<0.20	242,000	<0.0020	0.79	0.0288	1.63	1.2
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-14	T	849	0.125 J+	1.09	42.2	0.0414	226	0.0230	72,900	0.90	0.446	2.36	3,430	1.87	15.7	37,400	1,810	0.423	0.75	<0.20	279,000	0.0054	30.2	0.189	4.13	11.2
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	9.1	<0.50	5.9	689	<0.50	1,870	<0.050	467,000	<0.50	0.094	<0.50	32	<0.30	47	694,000	8,420	<2.0	1.01	<2.0	5,400,000	<0.050	<5.0	0.110	2.15	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	T	189	<0.50	6.7	625	<0.50	1,840	<0.050	445,000	<0.50	0.211	0.85	1,370	0.61	46	656,000	8,090	<2.0	0.75	<2.0	5,210,000	<0.050	9.1	0.157	2.66	4.1
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	3-Dec-14	D	9.5	0.030	0.383	12.9	<0.0050	184	0.0058	33,900	<0.50	0.054	<0.20	59	<0.050	6.88	23,600	882	<0.050	0.56	0.21 J	228,000	<0.0020	0.76	0.0124	1.61	1.1
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	3-Dec-14	T	15,300	0.527	6.58	129	0.716	201	0.230	49,800	13.2	7.49	35.9	45,200	25.2	28.9	32,000	1,570	2.10	16.1	0.52	226,000	0.0895	602	3.83	72.6	147
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	D	6.6	0.058	0.238	6.30	0.0051	111	0.0081	67,000	<0.50	<0.050	0.22	432	<0.050	7.49	28,800	1,670	0.114	0.37	<0.20	141,000	<0.0020	0.52	0.0179	1.27	5.5
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Mar-15	T	12,600	0.425	4.53	116	0.724	132	0.179	87,400	13.8	7.94	24.7	42,700	24.8	32.8	32,600	2,260	1.86	15.4	0.36	131,000	0.0960	382	2.33	65.5	136
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	D	5.9	<0.50	<2.0	602	<0.50	1,530	<0.050	495,000	<0.50	<0.050	<0.50	88	<0.30	26	648,000	8,350	<2.0	<0.50	10.6	4,870,000	<0.050	<5.0	0.088	1.37	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	17-Jun-15	T	575	<0.50	2.1	615	<0.50	1,500	<0.050	482,000	0.89	0.339	1.01	6,740	0.85	26	616,000	8,640	<2.0	1.12	<2.0	4,670,000	<0.050	21.1	0.146	2.95	8.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-15	D	7.3	0.75	8.2	482	<0.50	1,850	<0.050	371,000	<0.50	0.098	<0.50	33	<0.30	40.0	645,000	5,180	<2.0	0.87	<2.0	5,770,000	<0.050	<5.0	0.115	2.29	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	10-Sep-15	T	3,010	0.86	13.7	468	<0.50	1,570	<0.050	372,000	3.94	1.76	5.56	17,900	7.32	41	570,000	5,780	<2.0	3.75	<2.0	4,860,000	<0.050	138	0.563	13.0	33.4
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	D	10.3	0.024	0.43	49.7	<0.010	449	<0.010	83,300	<1.0	<0.10	<0.40	296	<0.10	13.5	81,100	2,170	<0.10	<0.40	0.95	798,000	<0.0040	0.77	0.0134	1.77	2.1
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	9-Dec-15	T	63.6	0.067	0.63	48.1	<0.010	449	0.013	63,300	<1.0	0.14	<1.0	2,640	0.16	12.3	65,200	1,730	0.14	<0.40	<0.40	647,000	<0.010	3.00	0.0186	2.17	10.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	D	14.7	0.030	0.190	5.46	<0.0050	81.5	<0.0050	18,900	<0.50	0.061	0.25	211	<0.050	4.79	13,500	463	<0.050	0.31	<0.20	74,700	<0.0020	0.63	0.0121	1.57	3.6
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	2-Mar-16	T	47.0	0.068	0.204	6.41	0.0060	89	0.0083	18,200	<0.50	0.085	0.64	734	0.334	4.80	13,300	491	0.085	0.39	<0.20	68,400	<0.0050	1.71	0.0169	1.67	4.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	D	9.0	<0.50	<2.0	175	<0.50	420	<0.050	310,000	<0.50	<0.050	<0.50	72	<0.30	24	271,000	8,120	<2.0	<0.50	<2.0	1,790,000	<0.050	<5.0	0.125	2.13	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	20-May-16	T	93.8	<0.50	<2.0	147	<0.50	450	0.058	244,000	<0.50	0.186	0.79	2,900	0.35	23	218,000	6,280	<2.0	<0.50	<2.0	1,670,000	<0.050	<5.0	0.155	1.90	6.9
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	12.2	<0.50	<2.0	263	<0.50	1,030	0.067	240,000	<0.50	0.078	<0.50	45	<0.30	49	374,000	3,550	<2.0	<0.50	<2.0	2,790,000	<0.050	<5.0	0.544	2.72	<3.0
DUP-6 (P9-3R)	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	D	36.6	<0.50	<2.0	321	<0.50	1,130	0.060	257,000	<0.50	0.122	<0.50	164	<0.30	51	411,000	3,440	<2.0	1.22	<2.0	3,010,000	<0.050	<5.0	0.687	2.54	<3.0
QA/QC RPD										Duplicates	D	100%	---	---	20%	---	9%	11%	7%	---	---	---	---	---	4%	9%	3%	---	---	---	8%	---	---	23%	7%	---
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	1,140	<0.50	<2.0	240	<0.50	990	0.112	219,000	0.65	0.535	2.46	4,010	2.54	47	343,000	3,320	<2.0	0.94	<2.0	2,570,000	<0.050	35.4	0.740	4.25	15.2
DUP-6 (P9-3R)	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	22-Aug-16	T	23.2	<0.50	<2.0	230	<0.50	1,030	0.062	216,000	<0.50	0.090	<0.50	132	<0.30	45	341,000	3,140	<2.0	<0.50	<2.0	2,610,000	<0.050	<5.0	0.370	1.91	<3.0
QA/QC RPD										Duplicates	T	---	---	---	4%	---	4%	57%	1%	---	---	---	187%	---	4%	1%	6%	---	---	---	2%	---	---	67%	76%	---
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	D	6.0	<0.50	<2.0	70.5	<0.50	450	<0.050	67,400	<0.50	0.176	<0.50	324	<0.30	<20	77,900	1,320	<2.0	<0.50	<2.0	928,000	<0.050	<5.0	<0.050	1.95	<3.0
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	24-Nov-16	T	518	<0.50	<2.0	39.9	<0.50	500	<0.050	27,300	0.58	0.489	2.12	2,310	1.41	<20	32,400	555	<2.0	1.49	<2.0	645,000	<0.050	13.2	0.172	3.73	8.7
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	15-Mar-17	D	5.7	0.055	0.201	19.7	<0.0050	290	0.0129	23,300	<0.50	0.179	<0.20	84	0.073	7.43	24,200	478	0.087	0.22	0.44	425,000	<0.0020	0.72	0.0202	1.79	3.3
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	15-Mar-17	T	751	0.262	0.661	28.3	0.0515	265	0.0376	24,400	0.54	0.626	1.87	2,420	2.05	6.96	24,000	429	0.424	0.92	<0.20	405,000	0.0087	14.4	0.237	2.77	9.3
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	9.4	0.023	0.29	8.79	<0.010	609	<0.010	35,500	<1.0	0.23	<0.40	<30	<0.10	20.5	49,500	316	0.19	<0.40	2.70	623,000	<0.0040	1.45	0.193	2.81	<2.0
DUP-7 (P9-3R)	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	D	8.8	<0.020	0.28	8.50	<0.010	651	<0.010	35,500	<1.0	0.21	<0.40	<30	<0.10	19.6	47,900	312	0.18	<0.40	1.09	618,000	<0.0040	1.40	0.188	2.77	<2.0
QA/QC RPD										Duplicates	D	7%	---	4%	3%	---	7%	---	0%	---	---	---	---	---	4%	3%	1%	---	---	85%	1%	---	4%	3%	1%	---
P9-3R	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	922	0.083	0.89	16.2	0.061	583	0.058	37,000	<1.0	0.69	2.0	3,410	2.19	23.6	54,700	309	0.80	0.88	<0.40	610,000	0.012	31.4	0.558	4.44	9.5
DUP-7 (P9-3R)	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	7-Jun-17	T	746	0.088	0.76	15.2	0.057	628	0.054	36,200	<1.0	0.54	2.1	2,790	1.79	23.9	54,800	304	0.77	0.73	<0.40	593,000	0.010	25.6	0.425	4.16	8.9
QA/QC RPD										Duplicates	T	21%	---	16%	6%	7%	7%	7%	2%	---	24%	---	20%	20%	1%	0%	2%	4%	---	---	3%	---	20%	27%	7%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	D	6.2	<0.50	2.1	127	<0.50	1,280	0.086	271,000	<0.50	5.22	1.15	38	<0.30	64	361,000	5,410	3.6	4.52	<2.0	3,450,000	<0.050	<5.0	3.25	0.89	20.1
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-12	D	<5.0	<0.50	<3.0	346	<0.50	1,590	<0.050	418,000	<0.50	1.63	<0.50	10,500	<0.30	71	643,000	7,830	<2.0	2.95	<2.0	5,060,000	<0.050	<5.0	2.98	1.07	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-12	D	2.5	0.152	2.25	93.6	<0.010	407	<0.010	60,900	<1.0	0.15	<0.40	740	<0.10	14.2	82,300	879	0.59	1.03	<0.40	595,000	<0.0040	<0.40	0.336	0.76	3.3
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	---	Well Not Sampled																								
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	14-Mar-13	D	3.5	0.072	0.794	92.3	<0.0050	215	0.0898	41,800	<0.50	0.177	0.48	581	<0.050	11.2	35,100	595	0.389	0.73	<0.20	199,000	<0.0020	<0.20	0.250	0.351	3.5
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	D	<5.0	<0.50	<2.0	882	<0.50	650	0.055	160,000	<0.50	0.193	<0.50	3,990	<0.30	30	132,000	2,820	<2.0	0.90	<2.0	1,470,000	<0.050	<5.0	1.13	0.85	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	T	9,890	1.04	9.8	1,050	<0.50	670	0.741	209,000	12.2	13.1	32.4	28,100	16.4	45	170,000	3,580	5.2	32.8	<2.0	1,580,000	0.057	369	2.79	35.8	114
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	D	7.9	0.65	<2.0	651	<0.50	1,750	<0.050	459,000	<0.50	0.227	<0.50	2,250	<0.30	51	724,000	3,930	<2.0	<0.50	<2.0	5,590,000	<0.050	<5.0	1.79	1.56	4.8
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	T	966	1.00	<4.0	688	<0.50	1,900	1.56	475,000	0.90	0.638	2.87	3,750	0.90	55	721,000	4,130	<2.0	4.49	<2.0	5,620,000	0.105	19.9	1.97	3.04	15.5
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	D	5.3	<0.50	9.4	337	<0.50	640	<0.050	91,100	<0.50	0.104	<0.50	36	<0.30	<20	121,000	670	<2.0	<0.50	<2.0	1,260,000	<0.050	<5.0	0.222	1.48	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	T	3,350	1.61	18.1	583	<0.50	650	0.265	166,000	5.01	3.94	13.3	10,900	5.49	22	232,000	1,220	3.5	13.5	<2.0	1,580,000	<0.050	134	0.782	14.2	38.5
P9-5A ^	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	T	125	<0.50	12.1	301	<0.50	670	<0.050	49,800	<0.50	0.245	0.81	547	0.34	<20	70,100	381	<2.0	0.88 J+	6.0	1,100,000	<0.050	6.5	0.167	2.31	3.5
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	D	5.8	0.096	2.64	65.6	<0.0050	254	0.0070	23,500	<0.50	0.139	<0.20	<30	<0.050	5.62	24,800	227	<0.050	0.23	<0.20	265,000	<0.0020	0.52	0.0323	1.25	2.3
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	T	238	0.204	2.27	75.6	0.0065	266	0.0329	20,300	<0.50	0.365	0.94	967	0.495	6.12	21,500	202	0.278	0.98	<0.20	246,000	<0.0040	9.76	0.0641	2.32	5.2
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	D	5.4	0.101	2.68	81.6	<0.0050	354	<0.0050	24,000	<0.50	0.081	<0.20	<30	<0.050	8.67	15,600	170	<0.050	0.24	<0.20	394,000	<0.0020	0.54	0.0872	1.60	1.6
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	T	63.2	0.136 J+	2.67	84.6	<0.0050	354	0.0115	24,700	<0.50	0.149	0.78	266	0.171	9.21	15,800	204	0.086	0.39	<0.20	370,000	<0.0020	3.31	0.0882	2.22	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	D	<5.0	<0.50	6.4	791	<0.50	1,820	<0.050	402,000	<0.50	0.089	<0.50	13	<0.30	49	679,000	4,330	<2.0	<0.50	<2.0	5,340,000	<0.050	<5.0	0.322	1.95	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	T	316	0.73	7.6	798	<0.50	1,720	<0.050	395,000	0.77	0.383	1.04	961	0.58	45	648,000	4,000	<2.0	1.43	<2.0	5,150,000	<0.050	17.7	0.352	3.55	6.7
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	D	3.4	0.040	0.356	72.6	<0.0050	371	<0.0050	30,800	<0.50	0.078	<0.20	<30	<0.050	8.55	41,000	267	<0.050	0.35	0.64	487,000	<0.0020	0.50	0.0172	1.27	2.1
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	T	335	0.195	0.772	145	0.0120	414	0.0328	38,400	0.65	0.280	0.85	976	0.605	9.77	52,000	320	0.258	1.28	<0.20	552,000	0.0034	15.2	0.0735	2.99	8.2
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	D	4.4	0.052	0.153	29.4	<0.0050	140	<0.0050	14,900	<0.50	0.076	0.38	<30	<0.050	4.51	14,200	101	<0.050	0.24	<0.20	168,000	<0.0020	0.31	0.0125	0.919	4.5
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-15	T	46.2	<0.11	0.193	54.0	<0.0050	154	0.0086	22,000	<0.50	0.088	<0.50	129	0.166	5.68	20,700	152	<0.050	<0.20	<0.20	179,000	<0.0050	2.01	0.0224	0.985	3.9
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	D	<5.0	<0.50	<2.0	1,090	<0.50	1,870	<0.050	464,000	<0.50	<0.050	<0.50	22	<0.30	37	713,000	6,900	<2.0	<0.50	<2.0	5,820,000	<0.050	<5.0	<0.050	1.06	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	T	8.7	<0.50	<2.0	1,020	<0.50	1,880	<0.050	468,000	<0.50	<0.050	<0.50	42	<0.30	38	725,000	6,850	<2.0	<0.50	<2.0	5,850,000	<0.050	<5.0	<0.050	1.10	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	D	<5.0	<0.50	<2.0	659	<0.50	1,820	<0.050	382,000	<0.50	0.058	<0.50	<10	<0.30	42	672,000	3,620	<2.0	<0.50	<2.0	5,720,000	<0.050	<5.0	0.103	1.74	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	T	90.5	0.52	<2.0	806	<0.50	1,870	<0.050	386,000	<0.50	0.157	<0.50	347	<0.30	45	680,000	3,650	<2.0	0.70	<2.0	5,780,000	<0.050	6.3	0.115	2.77	8.8
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	D	<5.0	<0.50	<2.0	40.8	<0.50	450	<0.050	21,900	<0.50	0.076	<0.50	<10	<0.30	<20	33,400	235	<2.0	<0.50	4.2	434,000	<0.050	<5.0	<0.050	0.74	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	T	872	<0.50	<2.0	1,120	<0.50	870	0.152	154,000	1.73	0.636	2.36	3,520	1.15	27	224,000	1,450	<2.0	2.78	2.4	1,710,000	<0.050	43.5	0.197	5.85	26.5
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	D	2.9	0.028	0.097	27.6	<0.0050	206	<0.0050	18,000	<0.50	0.110	<0.20	<30	<0.050	6.95	24,800	216	<0.050	<0.20	<0.20	269,000	<0.0020	0.26	0.0084	0.932	1.6
DUP-4 (P9-5)	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	D	5.6	0.024	0.081	28.3	<0.0050	211	0.0061	17,900	<0.50	0.104	<0.20	<30	<0.050	6.99	25,000	227	<0.050	<0.20	<0.20	268,000	<0.0020	0.35	0.0082	0.955	<1.0
QA/QC RPD										Duplicates	D	---	---	---	3%	---	2%	---	1%	---	---	---	---	---	1%	1%	5%	---	---	---	0%	---	---	---	2%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	T	14.2	0.040	0.090	30.2	<0.0050	197	0.0054	15,200	<0.50	0.085	<0.50	33	0.057	6.51	21,600	190	<0.050	<0.20	<0.20	257,000	<0.0050	0.63	0.0095	0.896	<3.0
DUP-4 (P9-5)	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	2-Mar-16	T	10.5	0.039	0.098	29.9	<0.0050	200	0.0104	15,000	<0.50	0.090	<0.50	40.0	0.058	6.37	21,400	188	<0.050	<0.20	<0.20	252,000	<0.0050	0.55	0.0097	0.858	<3.0
QA/QC RPD										Duplicates	T	---	---	---	1%	---	2%	---	1%	---	---	---	---	---	2%	1%	1%	---	---	---	2%	---	---	---	4%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	D	<5.0	<0.50	<2.0	967	<0.50	600	<0.050	653,000	<0.50	<0.050	<0.50	27	<0.30	41	573,000	4,420	<2.0	<0.50	<2.0	3,510,000	<0.050	<5.0	0.088	0.96	3.8
DUP-8 (P9-5)	Porewater EAZ	P9-3R	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	19-May-16	D	<5.0	<0.50	<2.0	966	<0.50	610	<0.050	648,000	<0.50	<0.050	<0.50	27	<0.30	40.0	568,000	4,650	<2.0	<0.50	<2.0	3,500,000	<0.050	<5.0	0.083	0.87	<3.0
QA/QC RPD										Duplicates	D	---	---	---	0%	---	2%	---	1%	---	---	---	---	---	2%	1%	5%	---	---	---	0%	---	---	6%	10%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	T	37.9	<0.50	<2.0	814	<0.50	680	0.074	696,000	<0.50	0.054	<0.50	108	<0.30	47	618,000	4,800	<2.0	<0.50	<2.0	3,810,000	<0.050	<5.0	0.087	1.00	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	D	<5.0	<0.50	<2.0	671	<0.50	1,840	<0.050	373,000	<0.50	<0.050	<0.50	<10	<0.30	44	619,000	2,220	<2.0	<0.50	7.8	4,830,000	<0.050	<5.0	0.057	0.96	<3.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Aug-16	T	423	<0.50	<2.0	858	<0.50	1,540	0.068	355,000	0.77	0.350	1.57	999	1.42	48	630,000	2,230	<2.0	1.58	<2.0	4,670,000	<0.050	24.6	0.113	3.22	11.4
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	D	12.5	<0.50	<2.0	51.2	<0.50	400	<0.050	41,700	<0.50	<0.050	<0.50	20	<0.30	<20	75,400	271	<2.0	<0.50	<2.0	620,000	<0.050	<5.0	<0.050	0.95	<3.0
DUP-6 (P9-5)	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	D	12.1	<0.50	<2.0	51.7	<0.50	410	<0.050	41,300	<0.50	0.058	<0.50	20	<0.30	<20	76,300	254	<2.0	<0.50	<2.0	623,000	<0.050	<5.0	<0.050	0.91	<3.0
QA/QC RPD										Duplicates	D	3%	---	---	1%	---	2%	---	1%	---	---	---	---	---	---	1%	6%	---	---	---	0%	---	---	---	4%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	T	55.1	<0.50	<2.0	130	<0.50	370	<0.050	50,700	<0.50	0.084	<0.50	97	<0.30	<20	89,000	284	<2.0	<0.50	<2.0	647,000	<0.050	<5.0	<0.050	1.02	6.5
DUP-6 (P9-5)	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	24-Nov-16	T	54.2	<0.50	<2.0	245	<0.50	360	<0.050	51,600	<0.50	0.090	<0.50	102	<0.30	<20	93,300	289	<2.0	<0.50	<2.0	669,000	<0.050	<5.0	<0.050	0.99	6.3
QA/QC RPD										Duplicates	T	2%	---	---	61%	---	3%	---	2%	---	---	---	5%	---	---	5%	2%	---	---	---	3%	---	---	---	3%	---
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	D	3.5	0.028	0.094	13.2	<0.0050	229	<0.0050	15,200	<0.50	<0.050	<0.20	<30	<0.050	4.99	17,300	84.9	0.056	<0.20	0.27	259,000	<0.0020	0.22	0.0043	0.990	1.0
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	16-Mar-17	T	97.0	0.199	0.128	31.8	<0.0050	268	0.0170	5,650	<0.50	0.132	<0.50	107	0.432	3.62	6,090	33.2	0.059	0.32	<0.20	189,000	<0.0050	4.11	0.0167	2.09	6.7
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	D	2.0	0.059	0.12	244	<0.010	154	<0.010	209,000	<1.0	<0.10	<0.40	74	<0.10	26.5	236,000	942	<0.10	<0.40	0.71	1,110,000	<0.0040	<0.40	0.0241	0.53	2.2
P9-5	Porewater EAZ	P9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	T	50.8	0.200	0.12	185	<0.010	167	0.014	138,000	<1.0	<0.10	<1.0	139	0.16	18.4	157,000	645	<0.10	<0.40	<0.40	764,000	<0.010	2.63	0.0262	0.89	<6.0
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	28-Sep-11	D	<5.0	<0.50	<2.0	85.6	<0.50	<10	0.151	97,700	<0.50	2.9	0.62	<10	<0.30	<20	31,200	1,660	3.8	3.88 J+	<2.0	147,000	<0.050	<5.0	1.52	<0.50	572
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Nov-11	---	Well Not Sampled																								
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Dec-11	D	<3.0	0.046	0.175	73.4	<0.0050	53.5	0.116	91,500	<0.50	2.66	0.82	<30	<0.050	18.8	26,700	1,510	3.52	3.17	<0.20	115,000	0.0127	<0.20	1.21	0.149	91.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	89.2	<0.50	<100	<0.050	110,000	<0.50	3.16	<0.50	404	<0.30	<20	33,600	1,800	2.1	3.11	<2.0	85,800	<0.050	<5.0	0.895	<0.50	18.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	1-Feb-12	D	691	0.054	0.241	86.3	0.0231	39.8	0.168	97,700	0.80	2.77	1.79	962	0.368	14.9	27,600	1,400	3.05	3.77	<0.20	97,800	0.0155	21.8	1.14	3.08	24.7
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	27-Mar-12	D	<6.0	0.175	0.85	252	<0.010	139	<0.010	229,000	<1.0	3.83	<1.0	2,300	<0.10	16.3	98,700	3,890	3.28	3.82	<0.40	417,000	0.0072	<0.40	1.96	<0.10	16.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Apr-12	D	6.4	0.091	1.06	185	<0.010	121	<0.010	166,000	<1.0	3.63	<1.0	1,460	<0.10	15.7	76,600	3,240	3.84	4.33	<0.40	393,000	0.0051	<0.40	2.14	<0.10	12.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	D	<3.0	0.084	0.506	111	<0.0050	78.3	0.0257	92,600	<0.50	3.20	<0.50	636	<0.050	20.4	39,300	1,700	4.44	3.04	<0.20	204,000	0.0084	<0.20	1.30	0.089	14.0
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jun-12	D	2.2	0.171	0.377	90.2	<0.0050	98.0	0.0670	96,100	<0.50	3.25	0.97	391	0.127	22.7	47,600	1,410	5.74	3.64	<0.20	289,000	0.0105	<0.20	1.27	0.094	19.7
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jul-12	D	1.3	0.039	1.32	147	<0.0050	78.9	0.0301	125,000	<0.50	3.25	1.84	2,850	0.122	19.7	41,200	1,910	4.71	3.07	<0.20	215,000	0.0079	<0.20	0.904	0.055	8.1
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Aug-12	D	<5.0	<0.50	<2.0	502	<0.50	300	<0.050	275,000	<0.50	4.91	0.86	7,010	<0.30	<20	125,000	3,960	2.9	6.40	<2.0	741,000	<0.050	<5.0	1.12	<0.50	15.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-12	D	<2.0	0.120	1.10	282	<0.010	280	0.028	253,000	<1.0	6.87	0.52	4,940	<0.10	27.0	117,000	4,070	3.37	6.93	<0.40	743,000	0.0108	<0.40	1.03	<0.10	22.8
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	201	<0.50	670	0.098	398,000	<0.50	8.14	<0.50	1,250	<0.30	34	297,000	5,690	2.5	7.26	<2.0	1,770,000	<0.050	<5.0	1.51	<0.50	12.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Nov-12	D	<2.0	0.056	0.29	94.3	<0.010	230	0.027	139,000	<1.0	2.67	0.46	162	<0.10	22.4	78,300	1,960	3.28	2.50	<0.40	563,000	0.0104	<0.40	0.912	<0.10	11.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Dec-12	D	<1.0	0.068	0.347	97.5	<0.0050	98.5	<0.0050	105,000	<0.50	1.52	0.43	379	<0.050	16.7	39,800	1,170	3.02	9.44	<0.20	201,000	0.0050	<0.20	0.594	<0.050	12.1
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jan-13	D	<1.0	0.043	0.612	139	<0.0050	130	0.0167	133,000	<0.50	1.82	0.26	2,290	<0.050	17.2	55,500	1,400	2.38	1.78	<0.20	251,000	0.0046	<0.20	0.683	<0.050	5.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Mar-13	D	1.2	0.040	0.189	96.2	<0.0050	65.5	0.181	112,000	<0.50	1.31	0.87	221	<0.050	16.9	43,700	1,280	2.52	3.45	<0.20	142,000	0.0099	<0.20	0.612	<0.050	18.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Jun-13	D	<5.0	<0.50	<2.0	162	<0.50	790	0.213	119,000	<0.50	0.561	1.15	45	<0.30	28	212,000	320	<2.0	4.12	<2.0	1,610,000	<0.050	<5.0	0.339	<0.50	15.0
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Jun-13	T	1,400	<0.50	<2.0	170	<0.50	620	0.253	120,000	1.43	1.72	3.29	2,760	0.56	24	168,000	676	<2.0	3.97	<2.0	1,130,000	0.051	50.9	0.427	5.69	18.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Sep-13	D	22.0	<0.50	<2.0	85.3	<0.50	1,760	0.226	200,000	<0.50	0.917	2.64	31	<0.30	45	377,000	506	2.1	14.3	<2.0	3,110,000	<0.050	<5.0	0.666	<0.50	15.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Sep-13	T	2,390	<0.50	<2.0	88.3	<0.50	1,600	0.202	201,000	2.10	1.50	4.62	3,910	0.83	41	393,000	457	<2.0	15.4	<2.0	3,200,000	<0.050	87.7	0.670	8.82	19.1
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-13	D	<5.0	<0.50	<2.0	152	<0.50	670	0.118	171,000	<0.50	0.627	1.24	180	<0.30	34	275,000	653	<2.0	2.75	<2.0	1,910,000	<0.050	<5.0	0.461	<0.50	12.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Dec-13	T	20,600	<0.50	8.2	316	0.55	620	0.433	176,000	20.5	10.3	40.8	41,500	8.68	43	261,000	1,170	<2.0	12.9	<2.0	1,760,000	0.135	426	1.21	84.6	95.6
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	D	<1.0	0.085	0.220	68.9	<0.0050	94.2	0.0620	138,000	<0.50	0.925	0.41	466	<0.050	16.4	64,200	1,160	1.02	1.84	<0.20	239,000	0.0052	<0.20	0.564	0.078	7.7
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Mar-14	T	13,200	0.238	4.15	160	0.389	116	0.189	123,000	13.2	6.08	23.6	26,800	5.11	21.6	59,200	1,280	1.06	6.80	0.21	206,000	0.0624	374	0.861	56.6	50.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	D	1.5	0.081	0.265	111	<0.0050	265	0.0639	92,300	<0.50	0.418	1.18	41	<0.050	20.6	66,700	590	1.18	1.75	<0.20	462,000	0.0128	<0.20	0.345	0.070	7.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Jun-14	T	3,400	0.135 J+	1.49	138	0.106	262	0.101	87,000	3.42	1.86	4.37	6,500	1.22	22.9	64,300	723	1.16	3.08	<0.20	429,000	0.0257	131	0.458	15.0	17.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	D	<5.0	<0.50	<2.0	148	<0.50	1,030	0.382	208,000	<0.50	0.603	1.63	29	<0.30	31	352,000	825	<2.0	2.64	<2.0	2,700,000	<0.050	<5.0	0.581	<0.50	14.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	T	6,100	<0.50	<2.0	186	<0.50	1,010	0.307	209,000	4.56	2.65	8.37	10,300	2.10	33	326,000	1,010	<2.0	4.60	<2.0	2,430,000	<0.050	187	0.733	22.1	32.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Dec-14	D	1.4	0.086	0.185	63.6	<0.0050	87.0	0.0271	64,200	<0.50	0.304	0.74	67	<0.050	9.42	30,300	603	0.740	2.86	<0.20	141,000	0.0042	<0.20	0.226	0.087	4.6
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Dec-14	T	24,400	0.181	7.00	226	0.710	106	0.107	64,600	25.6	9.50	40.0	45,700	10.7	22.8	39,400	1,160	0.821	13.7	0.30	138,000	0.0807	614	1.10	132	91.4
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-15	D	3.0	0.188	0.57	59.1	<0.010	680	0.030	31,700	<1.0	<0.10	1.08	<60	<0.10	13.3	75,200	5.84	0.88	0.42	<0.40	975,000	<0.0040	<0.40	0.101	0.12	6.1
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-15	T	1,120	0.348	3.05	86.9	0.110	640	0.076	30,400	<1.0	0.44	3.8	4,000	1.72	13.2	71,100	441	1.93	1.54	<0.40	933,000	0.011	31.0	0.465	4.05	8.8
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	219	<0.50	2,150	0.382	292,000	<0.50	<0.050	1.32	<10	<0.30	52	635,000	63.6	2.1	2.03	<2.0	5,450,000	<0.050	<5.0	0.393	<0.50	12.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Jun-15	T	561	<0.50	<2.0	201	<0.50	2,030	0.381	259,000	0.89	0.577	2.34	1,790	0.62	51	615,000	339	2.3	2.47	<2.0	5,170,000	<0.050	17.8	0.470	2.42	13.8
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-15	D	<5.0	<0.50	<2.0	111	<0.50	1,250	0.105	225,000	<0.50	<0.050	0.92	<10	<0.30	34	359,000	35.9	<2.0	2.36	<2.0	2,890,000	<0.050	<5.0	0.405	<0.50	23.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	10-Sep-15	T	538	0.71	<2.0	123	<0.50	1,320	0.134	221,000	0.99	0.675	1.90	1,530	0.49	35	345,000	799	<2.0	3.43	<2.0	2,800,000	<0.050	20.0	0.465	2.41	12.3

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-15	D	<1.0	0.055	0.196	87.7	<0.0050	183	0.0521	120,000	<0.50	<0.050	0.65	<30	<0.050	12.1	71,600	235	0.337	0.91	<0.20	393,000	0.0050	<0.20	0.230	<0.050	8.8
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Dec-15	T	668	0.300	0.860	87.1	0.0791	224	0.128	87,000	<0.50	0.447	1.43	899	0.642	11.6	58,000	1,440	1.98	2.76	0.45	374,000	0.0093	13.8	0.388	1.07	11.6
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	D	3.4	0.192	0.197	91.2	<0.0050	135	0.0298	55,300	<0.50	<0.050	1.21	<30	<0.050	12.0	70,700	42.2	0.388	0.48	<0.20	479,000	<0.0020	<0.20	0.0541	0.073	20.0
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	29-Feb-16	T	187	0.299	0.592	95.2	0.0225	129	0.0403	47,000	<0.50	0.325	1.59	584	0.544	11.7	63,400	321	0.811	1.03	<0.20	440,000	<0.0050	4.55	0.106	0.568	7.7
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-May-16	D	<5.0	<0.50	<2.0	260	<0.50	1,320	0.409	263,000	<0.50	0.070	2.00	<10	<0.30	49	570,000	175	<2.0	3.10	<2.0	4,140,000	<0.050	<5.0	0.385	<0.50	21.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-May-16	T	7,180	0.65	3.3	278	<0.50	1,220	0.469	257,000	6.76	3.58	13.2	14,400	3.55	46	555,000	1,270	<2.0	6.76	<2.0	4,040,000	0.056	232	0.693	26.8	45.5
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Aug-16	D	17.5	0.075	0.25	60.4	<0.010	331	0.039	100,000	<1.0	<0.10	1.70	50.0	<0.10	15.8	104,000	18.8	0.77	0.48	<0.40	828,000	0.0118	0.45	0.411	0.16	9.2
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	17-Aug-16	T	15,200	0.260	6.29	178	0.597	329	0.173	97,700	17.2	8.64	32.2	36,500	9.51	24.4	107,000	1,360	1.78	8.85	<0.40	778,000	0.094	489	1.08	77.9	78.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	23-Nov-16	D	24.1	0.083	0.20	65.5	<0.010	128	0.062	66,000	<1.0	0.17	0.98	84	0.19	11.7	45,700	252	0.56	2.15	<0.40	261,000	0.0073	0.66	0.128	0.18	13.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	23-Nov-16	T	54,500	0.394	17.9	446	1.81	157	0.722	75,100	50.1	35.9	120	103,000	27.3	41.3	65,800	6,880	3.27	35.2	0.51	254,000	0.264	568	1.93	232	311
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Mar-17	D	4.5	0.139	0.230	26.6	<0.0050	194	0.0089	21,200	<0.50	<0.050	0.75	<30	0.079	7.52	26,600	61.7	1.01	0.27	<0.20	249,000	0.0020	<0.20	0.0826	0.068	2.9
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	15-Mar-17	T	209,000	<0.50	30.3	1,110	7.54	380	5.49	93,000	239	140	604	407,000	125	132	145,000	7,820	2.9	127	<2.0	242,000	1.37	755	9.12	944	1,330
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	421	<0.50	640	0.565	254,000	<0.50	0.512	6.08	<10	<0.30	40.0	456,000	834	<2.0	6.97	<2.0	2,670,000	0.062	<5.0	0.093	<0.50	26.3
P9-7S	Porewater EAZ	P9-7	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jun-17	T	119	<0.50	<2.0	443	<0.50	630	0.594	262,000	<0.50	1.10	2.72	401	0.31	46	471,000	1,190	<2.0	7.70	<2.0	2,830,000	<0.050	<5.0	0.139	<0.50	27.3
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	28-Sep-11	D	<3.0	0.02	0.361	72.9	<0.0050	51.4	<0.0050	89,600	<0.50	0.599	<0.50	1,350	<0.050	1.46	25,600	772	0.23	0.9	0.59	19,800	0.0103	<0.20	0.0606	<0.050	5.8
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Nov-11	D	<5.0	<0.50	<2.0	84.9	<0.50	<10	<0.050	108,000	<0.50	0.213	<0.50	<10	<0.30	<20	32,800	825	<2.0	<0.50	<2.0	30,500	<0.050	<5.0	<0.050	<0.50	10.5
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Dec-11	D	<3.0	0.012	0.186	85.8	<0.0050	75.8	0.0059	105,000	<0.50	0.142	<0.50	3,580	<0.050	2.46	33,900	839	0.233	0.42	<0.20	49,700	0.0039	<0.20	0.0454	<0.050	7.1
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	86.5	<0.50	<100	<0.050	106,000	<0.50	0.112	<0.50	1,770	<0.30	<20	34,400	868	<2.0	<0.50	<2.0	72,200	<0.050	<5.0	<0.050	<0.50	4.7
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	1-Feb-12	D	<3.0	<0.010	0.141	83.5	<0.0050	59.4	<0.0050	100,000	<0.50	0.098	<0.50	1,550	<0.050	1.67	31,600	782	0.300	0.33	<0.20	61,800	0.002	<0.20	0.0282	<0.050	<3.0
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	27-Mar-12	D	<3.0	<0.010	0.163	63.7	<0.0050	52.7	<0.0050	86,500	<0.50	0.170	<0.50	315	<0.050	2.21	25,500	721	0.202	0.38	<0.20	27,500	0.0032	<0.20	0.0436	<0.050	<3.0
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Apr-12	D	6.6	0.013	0.330	63.6	<0.0050	48.2	<0.0050	82,300	<0.50	0.274	<0.50	1,860	<0.050	2.03	25,000	826	0.194	0.58	<0.20	36,600	0.0022	<0.20	0.0556	0.057	3.9
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-May-12	D	<3.0	0.011	0.301	68.0	<0.0050	49.0	0.0151	82,900	<0.50	0.222	<0.50	3,830	<0.050	2.82	24,900	696	0.289	0.57	<0.20	28,100	0.0025	<0.20	0.0553	<0.050	9.6
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jun-12	D	<1.0	0.021	0.290	62.3	<0.0050	45.4	0.0092	81,700	<0.50	0.308	0.32	2,150	<0.050	2.42	24,900	614	0.376	0.57	<0.20	35,500	<0.0020	<0.20	0.0675	<0.050	5.3
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	5-Jul-12	D	<1.0	0.011	0.255	66.4	<0.0050	69.4	0.0123	82,500	<0.50	0.333	0.44	1,670	<0.050	2.87	30,800	656	0.268	0.56	<0.20	82,800	0.0055	<0.20	0.0673	<0.050	3.2
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	2-Aug-12	D	<1.0	0.025	0.290	73.5	<0.0050	138	0.0411	90,100	<0.50	0.336	0.45	1,460	<0.050	4.72	51,600	648	0.341	0.66	<0.20	241,000	0.0060	<0.20	0.0939	<0.050	5.6
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-12	D	<2.0	0.036	0.34	161	<0.010	393	0.023	116,000	<1.0	0.54	0.46	1,530	<0.10	15.1	109,000	863	0.86	1.24	<0.40	797,000	0.0130	<0.40	0.215	<0.10	4.9
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Oct-12	D	79.6	<0.50	<2.0	158	<0.50	2,790	0.237	328,000	<0.50	1.38	0.76	733	<0.30	99	736,000	858	4.8	4.37	<2.0	5,980,000	0.059	<5.0	1.36	<0.50	5.5
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Nov-12	D	<1.0	0.045	0.213	73.3	<0.0050	185	0.0259	130,000	<0.50	0.857	0.40	1,190	<0.050	10.9	66,300	1,080	0.831	1.86	<0.20	349,000	0.0076	<0.20	0.273	0.051	2.4
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12	D	<1.0	0.029	0.339	75.7	<0.0050	110	0.0213	135,000	<0.50	0.489	0.28 J	3,250	<0.050	5.27	47,600	1,030	0.551	0.92	<0.20	124,000	0.0027	<0.20	0.147	<0.050	2.3 J
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	8-Jan-13	D	<1.0	0.045	0.298	81.9	<0.0050	88.1	0.0652	139,000	<0.50	0.473	0.32	2,520	<0.050	4.72	46,700	1,060	0.529	1.07	<0.20	72,700	0.0039	<0.20	0.146	<0.050	2.9
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	13-Mar-13	D	<1.0	0.018	0.195	78.0	<0.0050	52.0	0.0318	107,000	<0.50	0.335	0.43	2,500	<0.050	3.79	36,200	1,010	0.316	0.71	<0.20	42,900	0.0035	<0.20	0.0855	<0.050	4.6
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Jun-13	D	<1.0	0.014	0.300	65.8	<0.0050	57.8	0.0097	87,300	<0.50	0.257	0.34	2,110	<0.050	2.72	29,800	680	0.183	0.64	<0.20	52,200	0.0029	<0.20	0.0534	<0.050	3.2
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Sep-13	D	8.1	<0.50	<2.0	121	<0.50	900	0.052	201,000	<0.50	0.725	0.72	593	<0.30	29	241,000	954	<2.0	3.26	<2.0	1,760,000	<0.050	<5.0	0.427	<0.50	8.6
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-13	D	<1.0	0.042	0.215	151	<0.0050	144	<0.0050	268,000	<0.50	0.587	0.24	---	<0.050	7.89	93,000	1,900	0.858	1.15	<0.20	280,000	<0.0020	<0.20	0.317	<0.050	2.7
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Mar-14	D	<1.0	0.025	0.258	104	<0.0050	58.6	0.0071	104,000	<0.50	0.263	<0.20	4,670	<0.050	2.51	34,400	880	0.282	0.53	<0.20	66,700	<0.0020	<0.20	0.0705	<0.050	3.5
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Jun-14	D	<1.0	0.030	0.331	66.5	<0.0050	67.8	<0.0050	72,700	<0.50	0.249	0.73	1,720	<0.050	4.50	23,900	562	0.389	0.65	<0.20	49,300	<0.0020	<0.20	0.104	<0.050	4.3
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Sep-14	D	<1.0	0.031	0.255	106	<0.0050	118	0.0063	88,000	<0.50	0.200	0.22	3,830	<0.050	3.71	43,500	649	0.239	0.68	<0.20	221,000	<0.0020	<0.20	0.0665	<0.050	1.4
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	3-Dec-14	D	<1.0	0.025	0.294	111	<0.0050	70.2	<0.0050	118,000	<0.50	0.192	0.29	2,310	<0.050	2.57	34,800	1,090	0.131	1.07	<0.20	72,700	<0.0020	<0.20	0.0559	<0.050	2.5
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	12-Mar-15	D	<1.0	0.021	0.257	79.1	<0.0050	58.0	0.0138	89,000	<0.50	0.193	0.83	1,490	<0.050	1.92	25,700	748	0.156	0.44	<0.20	49,400	<0.0020	<0.20	0.0490	<0.050	4.1
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Jun-15	D	<1.0	0.031	0.288	76.2	<0.0050	67.6	0.0113	71,400	<0.50	0.178	0.40	2,030	<0.050	1.72	21,500	594	0.122	0.42	<0.20	66,500	<0.0020	<0.20	0.0411	<0.050	3.9
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-15	D	62.1	0.018	0.225	286	<0.0050	119	0.0133	265,000	<0.50	0.493	0.64	---	0.124	2.20	78,300	2,040	0.131	0.96	<0.20	225,000	<0.0020	3.44	0.0381	0.239	4.4
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	9-Dec-15	D	<1.0	0.021	0.211	220	<0.0050	85.9	0.0144	205,000	<0.50	0.219	0.99	2,850	<0.050	1.71	56,300	1,920	0.123	0.81	<0.20	139,000	<0.0020	<0.20	0.0284	<0.050	5.6
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	29-Feb-16	D	<1.0	0.020	0.264	122	<0.0050	57.2	0.0120	121,000	<0.50	0.192	0.38	5,520	<0.050	1.41	35,100	867	0.104	0.47	<0.20	86,300	<0.0020	<0.20	0.0329	<0.050	3.7
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	18-May-16	D	<1.0	0.034	0.239	99.4	<0.0050	88.5	0.0088	101,000	<0.50	0.213	0.33	2,930	<0.050	2.11	31,300	844	0.103	0.47	<0.20	127,000	<0.0020	<0.20	0.0357	<0.050	11.1
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	17-Aug-16	D	<1.0	0.021	0.224	70.1	<0.0050	83.7	<0.0050	71,300	<0.50	0.165	0.35	1,220	<0.050	1.73	24,500	549	0.137	0.38	<0.20	126,000	<0.0020	<0.20	0.0290	<0.050	1.2
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	23-Nov-16	D	77.5	0.036	0.442	119	0.0057	69.7	<0.0050	83,800	<0.50	0.183	<0.20	13,500	0.103	2.37	25,600	516	0.074	0.24	<0.20	88,700	<0.0020	2.28	0.0751	0.442	<1.0
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	15-Mar-17	D	<1.0	0.020	0.305	71.6	<0.0050	60.6	0.0065	67,200	<0.50	0.199	0.33	3,580	0.063	2.15	19,700	554	0.140	0.40	<0.20	44,000	<0.0020	<0.20	0.0435	<0.050	1.7
P9-7I	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	6-Jun-17	D	2.1	0.012	0.267	54.1	<0.0050	54.2	<0.0050	67,100	<0.50	0.181	2.38	1,010	<0.050	1.62	18,400	497	0.168	0.36	<0.20	35,000	<0.0020	<0.20	0.0381	<0.050	1.7
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11	D	<3.0	0.011	0.144	74.4	<0.0050	82.8	0.0063	91,100	<0.50	0.115	<0.50	679	<0.050	1.87	24,800	501	0.177	0.27	<0.20	21,500	0.0048	<0.20	0.0392	<0.050	<3.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11	D	<5.0	<0.50	<2.0	66.9	<0.50	<10	<0.050	91,600	<0.50	0.106	<0.50 UJ	<10	<0.30	<20	24,100	510	<2.0	<0.60	<2.0	21,200	<0.050	<5.0	<0.050	<0.50	5.3
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11	D	<3.0	0.012	0.116	67.6	<0.0050	102	0.0557	92,400	<0.50	0.099	<0.50	579 J	0.168	1.65	26,700	549	0.144	0.75	<0.20	22,800	0.0037	<0.20	0.0281	<0.050	12.6
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	64.4	<0.50	100	<0.050	99,300	<0.50	0.242	<0.50	25	<0.30	<20	37,900	592	<2.0	0.95	<2.0	110,000	<0.050	<5.0	0.065	<0.50	8.5
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	D	<3.0	0.026	0.110	56.0	<0.0050	78.8	0.0060	87,400	<0.50	0.126	<0.50	<30	0.087	2.29	26,000	476	0.177	0.38	<0.20	36,700	<0.0020	<0.20	0.048	<0.050	9.8
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	D	<3.0	<0.010	0.127	66.2	<0.0050	85.1	<0.0050	89,100	<0.50	0.088	<0.50	93	<0.050	1.25	24,200	512	0.089	0.29	<0.20	18,000	0.0023	<0.20	0.0321	<0.050	<3.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	D	<3.0	0.024	0.159	68.4	<0.0050	89.3	0.0068	89,600	<0.50	0.095	<0.50	1,200	<0.050	1.23	24,500	513	0.108	0.7	<0.20	24,800	<0.0020	<0.20	0.0277	<0.050	4.8
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	D	<3.0	<0.010	0.179	69.7	<0.0050	74.3	<0.0050	85,600	<0.50	0.148	<0.50	1,910	<0.050	1.53	23,400	512	0.126	0.34	<0.20	19,200	<0.0020	<0.20	0.0379	<0.050	<3.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12	D	1.5 J	0.015 J	0.284	63.7	<0.0050	71.6	0.0093 J	85,500	<0.50	0.246	0.23	1,500	<0.050	1.15	23,100	472	0.169	0.41 J	<0.20	20,000	<0.0020	<0.20	0.0432	<0.050	3.3 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jul-12	D	1.6	0.051	0.314	66.5	<0.0050	77.3	0.0094	85,200	<0.50	0.321	0.74	1,480	<0.050	0.63	24,900	484	0.163	0.61	<0.20	29,200	0.0023	<0.20	0.0393	<0.050	4.9
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	D	1.6 J	0.027	0.322	101	<0.0050	166	0.0096 J	102,000	<0.50	0.245	<0.20 UJ	1,330	<0.050	2.86	49,700	537	0.267	0.47	<0.20	229,000	0.0025	<0.20	0.106	<0.050	1.0 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	D	<2.0	0.033	0.31	175	<0.010	350	0.013	120,000	<1.0	0.37	<0.40	1,230	<0.10	7.18	87,200	603	0.47	0.74	<0.40	747,000	0.0071	<0.40	0.245	<0.10	3.2 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12	D	<5.0 UJ	<0.50	<2.0	132	<0.50	740	<0.050	142,000	<0.50	0.364	<0.50	445 J	<0.30	20	187,000	494	<2.0	1.08 J	<2.0	1,470,000	<0.050	<5.0	0.831	<0.50	<3.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	7-Nov-12	D	<1.0	0.040	0.318	67.4	<0.0050	223	0.0098	48,200	<0.50	0.177	0.25	405	<0.050	4.56	43,900	222	0.602	0.54	<0.20	351,000	0.0028	<0.20	0.231	<0.050	2.1
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12	D	<1.0	0.031	0.429	34.5	<0.0050	116	0.0276	60,700	<0.50	0.209	0.36 J	482	<0.050	1.32	26,700	291	0.240	0.49	<0.20	60,900	0.0024	<0.20	0.114	0.059	3.1 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13	D	<1.0	0.032	0.311	33.8	<0.0050	106	0.0136	66,900	<0.50	0.195	0.24	440	<0.050	1.16	25,100	345	0.187	0.42	<0.20	36,000	0.0021	<0.20	0.0863	0.053	2.0 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	25-Feb-13	---	Well Not Sampled																								
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13	D	<1.0	0.027 J	0.231	42.6	<0.0050	81.6	0.0346	74,500	<0.50	0.226	0.33	408	<0.050	0.91	23,900	438	0.159	0.46	<0.20	28,300	<0.0020	<0.20	0.0604	<0.050	13.4 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13	D	<1.0	0.018 J	0.248	62.2	<0.0050	134	0.0279	84,200	<0.50	0.235	0.30 J	807	<0.050	1.70	34,200	445	0.141	0.50	<0.20	109,000	0.0029	<0.20	0.0416	<0.050	3.5 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13	D	<2.0	0.045	0.25	63.7	<0.010	379	0.021 J	61,300	<1.0	0.22 J	0.41	420	<0.10	8.09	72,700	258	0.43	0.83 J	<0.40	665,000	0.0061	<0.40	0.101	<0.10	3.8 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13	D	<1.0	0.038 J	0.249 J	35.3	<0.0050	129	0.0059	68,800	<0.50	0.162 J	0.23	---	<0.050	2.03	34,600	324 J	0.253 J	0.46 J	<0.20	106,000	0.0025	<0.20	0.0556	<0.050	1.5 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	D	<1.0	0.022	0.315	40.9	<0.0050	88.6	0.0061 J	77,700	<0.50	0.223	<0.20	1,090	<0.050	0.73	24,900	434	0.114	0.43	<0.20	27,300	<0.0020	<0.20	0.0284	<0.050	3.4 J
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Jun-14	D	<1.0	0.011	0.407	62.9	<0.0050	93.0	<0.0050	88,200	<0.50	0.141	0.47 J	2,370	<0.050	0.64	25,500	448	0.109	0.35	<0.20	22,000	<0.0020	<0.20	0.0272	<0.050	1.9
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-14	D	<5.0	<0.50	<2.0	308	<0.50	950	0.140	217,000	<0.50	0.386	0.63	1,200	<0.30	<20	288,000	809	<2.0	1.79	<2.0	2,160,000	<0.050	<5.0	0.212	<0.50	7.3
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Dec-14	D	3.8	0.020	0.264	52.8	<0.0050	125	<0.0050	77,500	<0.50	0.113	0.45	386	<0.050	1.05	32,700	433	0.110	0.57	<0.20	80,600	<0.0020	<0.20	0.0244	<0.050	2.6
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Mar-15	D	1.7	0.024	0.214	48.1	<0.0050	96.6	0.0100	87,400	<0.50	0.147	0.80	82	<0.050	0.60	26,700	463	0.136	0.58	<0.20	33,100	<0.0020	0.22	0.0283	<0.050	9.6
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	263	<0.50	740	0.128	238,000	<0.50	0.234	<0.50	1,330	<0.30	<20	237,000	834	<2.0	1.00	<2.0	1,900,000	<0.050	<5.0	0.108	<0.50	5.2
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Sep-15	D	<5.0	<0.50	<2.0	105	<0.50	1,150	<0.050	111,000	<0.50	0.163	0.84	40.0	<0.30	<20	202,000	359	<2.0	1.23	<2.0	1,870,000	<0.050	<5.0	0.140	<0.50	7.2
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-Dec-15	D	<1.0	0.025	0.216	74.2	<0.0050	171	<0.0050	57,400	<0.50	0.052	0.52	206	<0.050	1.49	30,800	110	0.178	0.39	<0.20	160,000	<0.0020	<0.20	0.0297	<0.050	9.4
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	29-Feb-16	D	<1.0	0.034	0.351	50.3	<0.0050	103	0.0159	65,400	<0.50	0.578	0.34	1,620	<0.050	0.99	24,200	571	0.335	0.51	<0.20	49,800	<0.0020	<0.20	0.0469	<0.050	11.0
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	18-May-16	D	10.3	0.028	0.344	53.5	<0.0050	116	0.0090	77,900	<0.50	0.281	0.75	1,490	0.079	1.61	30,100	434	0.181	0.49	<0.20	86,100	0.0024	<0.20	0.0452	0.050	4.3
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Aug-16	D	3.6	0.059	0.194	61.8	<0.0050	198	0.0161	87,000	<0.50	<0.050	0.33	<30	<0.050	3.92	59,700	276	0.234	0.57	<0.20	333,000	0.0053	<0.20	0.0344	<0.050	2.3
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	23-Nov-16	D	1.9	0.022	0.355	54.5	<0.0050	108	0.0068	80,200	<0.50	0.352	0.42	1,930	<0.050	1.06	30,100	445	0.126	0.40	<0.20	66,000	0.0021	<0.20	0.0266	<0.050	1.6
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	15-Mar-17	D	<1.0	0.062	0.226	46.6	<0.0050	86.4	0.0066	77,000	<0.50	0.318	0.44	737	<0.050	0.93	25,500	448	0.177	0.50	<0.20	34,900	<0.0020	<0.20	0.0340	<0.050	2.8
P9-7D	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	6-Jun-17	D	<1.0	0.039	0.231	47.4	<0.0050	80.1	0.0075	83,800	<0.50	0.323	<0.20	1,890	<0.050	0.59	23,900	473	0.193	0.47	<0.20	25,100	0.0028	<0.20	0.0335	<0.050	2.3
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	5-Jun-12	D	7.6	1.58	3.2	186	<0.50	840	0.139	77,300	<0.50	0.454	1.30	67	<0.30	21	145,000	312	4.4	1.01	<2.0	1,640,000	<0.050	<5.0	3.26	0.87	8.9
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Sep-12	D	<5.0	0.78	<5.0	191	<0.50	2,510	<0.050	347,000	<0.50	4.91	<0.50	<10	<0.30	80	833,000	2,890	4.6	3.6	<2.0	6,270,000	0.099	<5.0	7.92	0.97	5.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Dec-12	D	<2.0	0.557	1.61	46.0	<0.010	353	0.052	22,500	<1.0	0.46	<0.40	<30	<0.10	13.5	29,900	148	0.28	1.82	<0.40	427,000	0.0044	<0.40	0.210	0.35	3.5
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	25-Feb-13	---	Well Not Sampled																								
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	13-Mar-13	D	<5.0	<0.50	<2.0	667	<0.50	170	0.331	103,000	<0.50	4.05	1.77	<10	<0.30	29	224,000	845	3.1	6.25	<2.0	1,310,000	<0.050	<5.0	1.09	<0.50	6.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	D	<2.0	0.623	1.87	211	<0.010	836	0.317	30,300	<1.0	0.87	1.18	<30	<0.10	16.9	86,400	84.5	0.47	3.16	<0.40	902,000	0.0207	<0.40	0.0694	0.29	10.3
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	11-Jun-13	T	209	0.642	1.76	279	0.014	803	0.241	26,200	<1.0	3.80	1.1	210	0.55	17.2	79,800	171	0.47	2.67	<0.40	877,000	0.0205	10.2	0.0872	0.78	7.8
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	D	6.0	0.51	<4.0	124	<0.50	2,490	0.273	341,000	<0.50	9.03	1.34	28	<0.30	62	789,000	1,660	2.9	4.83	<2.0	5,990,000	0.064	<5.0	0.622	<0.50	16.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Sep-13	T	195	0.55	<4.0	282	<0.50	2,560	0.336	330,000	<0.50	9.48	1.84	217	0.83	65	771,000	1,430	3.0	4.87	<2.0	5,760,000	0.058	13.6	0.651	0.87	14.9
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	D	<5.0	<0.50	<2.0	249	<0.50	910	0.319	150,000	<0.50	1.02	1.16	<10	0.37	38	398,000	34.8	3.3	2.74	<2.0	2,990,000	<0.050	<5.0	0.815	<0.50	9.4
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Dec-13	T	1,620	<0.50	<2.0	720	<0.50	880	0.591	195,000	1.43	3.29	6.09	1,500	3.41	46	488,000	85.7	3.5	3.32	<2.0	3,580,000	<0.050	100	1.31	4.47	15.1
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	D	1.1	0.240	0.930	33.8	<0.0050	205	0.0377	8,740	<0.50	0.164	0.57	<30	0.055	4.23	12,300	4.16	0.181	0.31	<0.20	200,000	<0.0020	<0.20	0.0481	0.169	5.2
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Mar-14	T	509	0.284	0.975	127	0.0233	221	0.0806	10,800	0.67	1.12	1.62	465	0.859	5.31	15,600	26.8	0.256	0.64	<0.20	226,000	<0.0060	22.9	0.121	1.06	4.8
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	D	1.5	0.390	1.07	36.9	<0.0050	651	0.0849	16,700	<0.50	0.422	0.57	<30	<0.050	12.0	41,700	23.4	0.451	0.48	<0.20	469,000	0.0055	<0.20	0.0567	0.243	5.2
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-14	T	176	0.417	1.26	49.0	0.0097	679	0.0540	5,720	<0.50	3.59	0.67	226	0.714	8.73	14,200	98.4	0.498	0.41	<0.20	308,000	0.0045	10.3	0.0412	0.728	<3.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	D	<5.0	<0.50	3.5	123	<0.50	2,060	0.190	360,000	<0.50	9.16	1.13	129	<0.30	66	863,000	799	4.2	5.66	<2.0	6,710,000	0.058	<5.0	0.729	<0.50	20.3
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Sep-14	T	22.8	<0.50	3.8	137	<0.50	2,030	0.182	357,000	<0.50	9.13	<0.50	183	0.38	63	859,000	808	4.2	5.02	<2.0	6,680,000	<0.050	<5.0	0.723	<0.50	17.7
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	D	2.3	0.177	0.677	30.7	<0.0050	151	0.0674	14,100	<0.50	0.212	0.79	<30	0.072	7.41	24,100	10.2	0.411	1.02	<0.20	298,000	0.0025	<0.20	0.137	0.241	4.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	3-Dec-14	T	26.5	0.204	0.748	52.6	<0.0050	158	0.0617	13,700	<0.50	0.363	<0.50	78	0.166	7.94	23,100	16.4	0.473	0.78	<0.20	290,000	0.0025	1.33	0.148	0.308	<3.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-15	D	2.3	0.231	0.676	30.1	<0.0050	177	0.0599	11,100	<0.50	0.150	0.88	<30	<0.050	3.10	17,200	5.48	0.193	0.38	<0.20	208,000	<0.0020	<0.20	0.0276	0.151	7.20
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Mar-15	T	122	0.267	0.813	81.5	0.0077	182	0.0439	6,170	<0.50	0.891	<0.50	185	0.388	2.85	9,870	39.4	0.274	0.31	<0.20	177,000	<0.0050	5.61	0.0327	0.395	<3.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	D	<5.0	<0.50	<2.0	157	<0.50	2,720	0.368	300,000	<0.50	2.15	1.55	<10	0.38	53	796,000	139	3.1	3.20	<2.0	6,760,000	<0.050	<5.0	0.149	<0.50	33.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	17-Jun-15	T	13.7	<0.50	<2.0	169	<0.50	2,710	0.386	291,000	<0.50	2.52	1.17	51	0.50	54	779,000	155	3.2	1.95	<2.0	6,400,000	<0.050	<5.0	0.155	<0.50	16.6
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	D	<5.0	<0.50	2.6	81.5	<0.50	2,480	<0.050	245,000	<0.50	5.83	<0.50	775	<0.30	62	702,000	666	5.8	10.9	<2.0	6,110,000	<0.050	<5.0	0.329	<0.50	26.9
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	10-Sep-15	T	77.9	<0.50	3.5	154	<0.50	2,490	0.417	251,000	<0.50	7.27	<0.50	1,310	1.34	62	706,000	750	6.8	9.79	<2.0	6,250,000	<0.050	<5.0	0.364	0.86	16.4
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	D	8.7	0.091	0.974	21.2	<0.0050	556	0.0237	10,100	<0.50	0.315	0.54	62	<0.050	23.1	16,900	8.63	0.225	0.27	<0.20	382,000	<0.0020	0.56	0.0157	0.398	7.9
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	9-Dec-15	T	115	0.215	7.84	77.6	0.0281	524	0.0458	8,000	0.62	1.92	0.63	3,770	1.01	36.0	13,900	82.1	0.723	0.41	0.27	367,000	<0.0050	3.15	0.0941	2.75	4.8
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	29-Feb-16	D	<5.0	<0.50	<2.0	167	<0.50	200	0.398	198,000	<0.50	2.82	1.43	16	<0.30	28	372,000	107	<2.0	2.29	<2.0	1,350,000	<0.050	<5.0	0.297	<0.50	21.7
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	29-Feb-16	T	26.1	<0.50	<2.0	188	<0.50	190	0.354	183,000	<0.50	3.11	1.10	402	0.57	29	356,000	110	<2.0	1.78	<2.0	1,340,000	<0.050	<5.0	0.278	0.61	13.1
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	D	<5.0	<0.50	<2.0	151	<0.50	2,510	0.399	249,000	0.54	1.61	2.13	99	0.51	84	756,000	94.0	3.4	2.15	<2.0	6,370,000	<0.050	<5.0	0.514	0.71	24.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-May-16	T	116	<0.50	2.4	179	<0.50	2,740	0.324	249,000	<0.50	5.22	1.86	947	1.62	86	764,000	254	3.5	2.02	<2.0	6,480,000	0.053	<5.0	0.544	1.51	17.3
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	D	12.8	<0.50	<2.0	81.9	<0.50	3,240	0.180	284,000	<0.50	0.395	1.07	61	0.57	102	840,000	38.5	8.1	1.34	<2.0	7,200,000	<0.050	<5.0	1.53	0.93	14.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	19-Aug-16	T	19,500	0.66	15.0	1,860	1.34	3,390	1.22	296,000	19.1	26.3	59.9	25,800	48.4	132	858,000	959	7.0	22.8	<2.0	7,170,000	<0.050	330	4.89	52.0	133
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	D	<5.0	<0.50	<2.0	97.3	<0.50	490	0.116	84,900	<0.50	0.448	0.93	29	<0.30	31	222,000	44.0	<2.0	0.66	<2.0	1,230,000	<0.050	<5.0	0.284	0.52	5.5
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	23-Nov-16	T	1,070	<0.50	3.4	411	<0.50	440	0.242	81,200	1.36	9.38	6.87	2,010	5.10	29	212,000	575	3.0	2.42	<2.0	1,200,000	<0.050	47.0	0.642	5.53	16.1
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	D	9.4	0.175	0.53	14.4	<0.010	293	0.024	10,100	<1.0	0.14	0.67	<30	0.10	9.96	30,100	5.45	0.67	<0.40	<0.40	530,000	<0.0040	<0.40	0.0637	0.46	3.2
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	15-Mar-17	T	105	0.289	0.80	27.2	<0.010	317	0.034	12,700	<1.0	1.79	1.2	195	0.63	10.3	39,300	75.8	0.77	0.42	<0.40	571,000	<0.010	3.00	0.110	0.86	<6.0
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	D	<5.0	<0.50	<2.0	92.5	<0.50	2,280	0.141	185,000	<0.50	0.067	1.89	<10	0.30	103	560,000	5.88	4.7	0.52	<2.0	4,660,000	<0.050	<5.0	0.969	0.66	8.1
P9.5-5	Porewater EAZ	P9.5-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	7-Jun-17	T	59.6	<0.50	<2.0	83.4	<0.50	2,160	0.130	190,000	<0.50	1.83	2.33	152	0.60	97	581,000	100	4.7	0.57	<2.0	4,820,000	<0.050	<5.0	1.01	0.94	7.6
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	28-Sep-11	---	Well Not Sampled																								
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	5-Nov-11	D	11.5	<0.50	<2.0	12.1	<0.50	610	<0.050	24,800	<0.50	0.509	2.58	<10	<0.30	<20	49,800	9.94	2.4	24.7	<2.0	802,000	<0.050	<5.0	0.929	0.60	85.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-11	D	90.9	<0.50	2.4	<1.0	<0.50	110	<0.050	993	1.69	0.245	<2.0	109	<0.30	<20	2,020	3.35	<2.0	10.9	<2.0	119,000	<0.050	<5.0	0.164	1.02	24.1
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Mar-12	D	56.4	0.146	0.80	8.60	<0.010	247	0.012	12,400	<1.0	0.17	1.3	56	<0.10	10.2	32,600	13.0	0.93	1.51	<0.40	420,000	0.0088	0.77	0.175	0.60	136
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-12	D	<5.0	<0.50	<2.0	40.7	<0.50	700	0.073	64,700	1.05	0.103	2.22	16	<0.30	24	151,000	6.44	2.4	13.5	<2.0	1,390,000	<0.050	<5.0	0.297	<0.50	51.6
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Sep-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Dec-12	D	7.9	<0.50	<2.0	27.2	<0.50	470	<0.050	54,800	<0.50	0.057	1.52	<10	<0.30	<20	109,000	1.83 J	<2.0	0.76	<2.0	955,000	<0.050	<5.0	0.113	<0.50	27.1
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	13-Mar-13	D	21.7	0.171	0.872	21.0	<0.0050	211	0.0329	24,200	<0.50	<0.050	2.31	<30	<0.050	13.5	55,800	0.91	0.586	0.63	<0.20	485,000	0.0061	<0.20	0.120	0.555	13.4
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13	D	<5.0	<0.50	<2.0	117	<0.50	890	0.170	145,000	<0.50	<0.050	5.19	<10	<0.30	29	302,000	1.79	<2.0	1.38	<2.0	2,200,000	<0.050	<5.0	0.105	<0.50	44.9
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Jun-13	T	17.8	<0.50	<2.0	111	<0.50	870	0.157	134,000	1.30	0.062	5.80	28	<0.30	30	297,000	2.84	<2.0	1.24	<2.0	2,240,000	<0.050	<5.0	0.114	<0.50	41.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13	D	9.9	<0.50	<2.0	167	<0.50	1,700	0.203	257,000	<0.50	0.113	5.88	<10	<0.30	30	414,000	2.97	3.2	1.89	<2.0	3,650,000	<0.050	<5.0	0.323	<0.50	24.2
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	17-Sep-13	T	529	<0.50	<2.0	172	<0.50	1,800	0.192	254,000	5.60	0.424	7.40	604	0.62	34	410,000	39.0	3.8	2.14 J+	<2.0	3,750,000	<0.050	16.2	0.507	1.34	27.5
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Dec-13	D	57.6	0.138	0.94	7.00	<0.010	594	<0.010	31,300	<1.0	0.12	2.24	76	<0.10	14.4	73,700	28.0	1.65	0.42	0.760	910,000	0.0041	3.21	0.346	0.58	10.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	16-Dec-13	T	1,530	0.246	<3.0	19.8	0.130000	577	<0.010	39,600	160	1.56	12.3	4,740	1.72	15.6	84,700	249	2.19	2.69	<0.50	955,000	0.0126	49.5	0.935	5.12	61.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	D	35.0	0.194	1.22	1.61	0.0058	104	0.0068	2,540	<0.50	0.113	2.37	<30	<0.050	3.89	3,920	0.78	0.347	0.33	<0.20	109,000	0.0025	0.46	0.0899	0.598	5.6
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Mar-14	T	3,280	0.210	2.17	13.7	0.305	108	0.0202	2,910	54	1.74	10	3,190	2.78	5.25	5,040	152	0.874	2.01	<0.20	102,000	0.0189	37.5	0.941	4.75	15.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	D	8.4	0.196	0.99	36.3	<0.010	411	0.024	42,000	<1.0	<0.10	2.12	<30	<0.10	15.8	102,000	0.44	1.48	0.53	<0.40	834,000	0.0106	<0.40	0.111	0.72	6.3
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Jun-14	T	236	0.251	1.12	18.9	0.026	300	<0.010	22,600	<1.0	0.15	2.8	236	0.29	12.3	61,000	7.72	2.20	0.41	<0.40	545,000	0.0082	3.86	0.199	1.22	<6.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14	D	<5.0	<0.50	<2.0	283	<0.50	1,830	0.372	332,000	<0.50	<0.050	3.06	<10	<0.30	35	691,000	56.8	2.5	1.66	<2.0	5,100,000	<0.050	<5.0	0.631	<0.50	34.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	11-Sep-14	T	59.0	<0.50	<2.0	332	<0.50	2,080	0.411	367,000	1.95	0.184	4.22	118	<0.30	40.0	773,000	8.88	2.9	1.69	<2.0	5,770,000	<0.050	<5.0	0.646	0.62	19.1
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	D	6.1	0.132	0.642	7.19	<0.0050	182	0.0106	13,800	<0.50	<0.050	1.13	<30	<0.050	8.85	22,300	0.27	0.393	0.37	<0.20	317,000	0.0034	<0.20	0.0922	0.375	9.3
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	3-Dec-14	T	308	0.128	0.721	7.37	0.0372	193	<0.0050	12,600	<0.50	0.113	1.00	248	0.273	8.63	21,100	7.57	0.485	0.27	0.20	305,000	0.0047	5.23	0.169	0.621	7.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	D	5.8	0.105	0.510	3.73	<0.0050	100	<0.0050	6,020	<0.50	<0.050	1.82	<30	<0.050	2.69	14,400	0.31	0.658	0.26	<0.20	212,000	0.0022	<0.20	0.0403	0.368	8.5
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	12-Mar-15	T	971	0.140	0.927	12.4	0.0810	107	<0.0050	5,870	10.6	0.414	4.71	1,580	1.12	3.47	15,200	78.1	0.753	0.67	0.22	211,000	0.0081	32.8	0.357	2.34	27.3
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	418	<0.50	1,580	0.432	324,000	<0.50	<0.050	1.43	<10	<0.30	36	648,000	1.95	<2.0	1.76	<2.0	4,950,000	<0.050	<5.0	0.106	<0.50	36.5
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	15-Jun-15	T	1,240	<0.50	<2.0	427	<0.50	1,550	0.517	318,000	6.86	0.554	4.06	1,590	1.45	36	632,000	94.5	<2.0	3.57	<2.0	4,800,000	<0.050	41.0	0.555	2.60	52.3
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15	D	<5.0	<0.50	<2.0	110	<0.50	1,720	0.202	369,000	<0.50	<0.050	2.23	<10	<0.30	39	512,000	1.49	3.4	1.00	<2.0	3,950,000	<0.050	<5.0	0.581	<0.50	15.4
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	10-Sep-15	T	30.6	<0.50	<2.0	115	<0.50	1,690	0.224	362,000	0.81	<0.050	2.85	34	<0.30	36	511,000	4.39	3.4	0.78	<2.0	3,900,000	<0.050	<5.0	0.537	<0.50	61.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	D	4.1	0.123	0.55	10.4	<0.010	459	0.011	20,400	<1.0	<0.10	1.39	<30	<0.10	24.0	37,600	<0.40	1.34	<0.40	0.43	591,000	0.0068	<0.40	0.129	0.47	6.6
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	7-Dec-15	T	1,230	0.113	0.91	15.5	0.142	442	0.018	18,700	1.1	0.39	2.0	1,180	1.04	21.9	35,400	53	1.35	0.67	<0.40	546,000	<0.010	26.8	0.508	1.99	6.5
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Feb-16	D	8.7	0.069	0.329	4.45	<0.0050	64.7	0.0061	6,820	<0.50	<0.050	1.25	<30	<0.050	4.16	10,100	0.30	0.195	0.24	<0.20	153,000	<0.0020	<0.20	0.0323	0.276	8.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	29-Feb-16	T	547	0.074	0.472	6.68	0.0333	65	0.0098	6,400	1.83	0.242	1.72	441	0.478	4.25	10,200	28.7	0.250	0.33	<0.20	154,000	0.0055	12.4	0.188	0.833	8.7
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-May-16	D	<5.0	<0.50	<2.0	334	<0.50	710	0.430	217,000	<0.50	<0.050	2.71	<10	<0.30	<20	403,000	2.78	<2.0	1.64	<2.0	2,500,000	<0.050	<5.0	0.055	<0.50	105
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	18-May-16	T	50.2	<0.50	<2.0	354	<0.50	690	0.379	227,000	<0.50	0.059	2.19	52	<0.30	<20	409,000	4.01	<2.0	1.37	<2.0	2,380,000	<0.050	<5.0	0.053	<0.50	62.9
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	D	5.1	<0.50	<2.0	348	<0.50	1,900	0.507	246,000	<0.50	0.051	3.60	<10	<0.30	29	570,000	12.2	<2.0	1.97	<2.0	4,380,000	0.058	<5.0	0.080	<0.50	28.7
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	19-Aug-16	T	811	<0.50	<2.0	365	<0.50	2,000	0.577	252,000	9.77	0.392	6.31	984	0.96	27	578,000	79.4	<2.0	2.57	<2.0	4,440,000	0.059	27.1	0.253	1.66	48.0
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Nov-16	D	6.9	<0.50	<2.0	46.8	<0.50	430	0.207	123,000	<0.50	<0.050	2.22	<10	<0.30	25	234,000	2.39	<2.0	0.98	<2.0	1,420,000	<0.050	<5.0	<0.050	<0.50	20.7
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	22-Nov-16	T	314	<0.50	<2.0	50.5	<0.50	410	0.224	125,000	0.52	0.150	1.43	279	0.47	25	234,000	19.1	<2.0	1.05	<2.0	1,460,000	<0.050	9.0	0.167	0.58	22.7
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	D	26.1	0.080	1.13	4.89	0.0056	196	<0.0050	10,100	<0.50	<0.050	1.64	<30	0.097	7.89	29,300	0.45	0.732	<0.20	<0.20	331,000	<0.0020	<0.20	0.118	0.754	30.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	14-Mar-17	T	2,030	0.112	1.32	9.21	0.148	198	0.0127	8,970	1.17	0.535	3.23	1,280	1.80	7.87	25,900	66.3	0.767	0.53	<0.20	283,000	0.0092	31.3	0.690	2.52	32.6
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	D	9.5	<0.50	<2.0	129	<0.50	500	0.170	89,800	<0.50	<0.050	3.23	<10	<0.30	<20	190,000	9.92	<2.0	1.76	<2.0	1,450,000	<0.050	<5.0	<0.050	<0.50	28.8
P10-3S	Porewater EAZ	P10-3	USAT	EB	0.2-0.4	0.2	0.4	Weathered Colluvium	---	6-Jun-17	T	507	<0.50	<2.0	139	<0.50	510	0.194	97,400	4.09	0.316	5.11	1,150	1.04	<20	200,000	113	<2.0	2.46	<2.0	1,640,000	<0.050	18.5	0.167	1.20	38.9
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	28-Sep-11	D	<5.0	<0.50	<2.0	200	<0.50	600	1.09	409,000	<0.50	12.5	0.8	33	<0.30	<2.0	497,000	12,000	<2.0	7.72	4.2	2,470,000	0.091	<5.0	0.064	<0.50	81.1
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Oct-11	D	3,030	<0.50	<2.0	181	<0.50	670	0.98	383,000	4.67	8.87	5.38	3,210	1.27	<20	451,000	9,690	<2.0	11.7	<2.0	2,480,000	0.094	93.2	0.206	9.31	1,110
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-11	D	13.0	<0.50	<2.0	77.6	<0.50	500	0.296	132,000	<0.50	2.84	<2.0	<10	<0.30	<20	164,000	3,290	<2.0	4.43	<2.0	1,370,000	<0.050	<5.0	0.06	0.5	159
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	29-Mar-12	D	6.3	<0.50	<2.0	88.6	<0.50	730	0.130	128,000	<0.50	0.170	1.48	16	<0.30	<20	224,000	347	<2.0	3.58	<2.0	1,820,000	0.073	<5.0	0.115	<0.50	207
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	5-Jun-12	D	<5.0	<0.50	<2.0	165	<0.50	680	0.115	119,000	<0.50	0.456	1.57	46	<0.30	<20	246,000	359	<2.0	1.54	<2.0	1,840,000	<0.050	<5.0	0.059	<0.50	22.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-12	D	<5.0	<0.50	<2.0	140	<0.50	1,590	0.645	339,000	<0.50	0.599	1.57	227	<0.30	30	654,000	1,570	<2.0	1.89	<2.0	4,670,000	0.075	<5.0	0.118	<0.50	36.9
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Dec-12	D	6.2	<0.50	<2.0	17.7	<0.50	570	<0.050	53,700	<0.50	0.063	1.36	12	<0.30	<20	94,300	36.6	<2.0	<0.50	<2.0	845,000	<0.050	<5.0	0.179	0.58	11.9
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	13-Mar-13	D	7.7	0.117	0.47	31.6	<0.010	281	0.017	44,100	<1.0	<0.10	1.22	<30	<0.10	12.6	94,700	3.32	0.59	<0.40	<0.40	726,000	<0.0040	<0.40	0.0547	0.50	12.4
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-13	D	<5.0	<0.50	<2.0	173	<0.50	980	0.095	154,000	<0.50	0.367	1.09	130	<0.30	24	307,000	722	<2.0	0.81	<2.0	2,370,000	<0.050	<5.0	0.059	0.61	21.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Jun-13	T	6,070	<0.50	<2.0	172	<0.50	920	0.250	152,000	12.7	4.30	12.1	6,780	2.98	28	290,000	1,190	2.7	4.43	<2.0	2,190,000	<0.050	197	0.296	23.0	75.6
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13	D	47.2	<0.50	<2.0	207	<0.50	2,570	0.484	334,000	0.71	0.214	2.39	53	0.59	39	765,000	33.1	<2.0	3.35	<2.0	5,610,000	0.057	<5.0	0.072	0.56	25.8
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	17-Sep-13	T	3,920	<0.50	<2.0	231	<0.50	2,620	0.497	349,000	4.73	1.93	5.80	3,570	1.33	43	795,000	729	2.6	2.96 J+	<2.0	5,820,000	0.072	155	0.246	15.3	36.6
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	36.7	<0.50	810	<0.050	104,000	<0.50	0.087	0.88	<10	<0.30	<20	230,000	21.9	<2.0	<0.50	<2.0	1,850,000	<0.050	<5.0	0.102	<0.50	21.7
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	16-Dec-13	T	1,360	<0.50	<2.0	39.9	<0.50	800	0.065	87,000	2.08	0.923	3.30	1,400	0.5	<20	188,000	490	2.1	1.41	<2.0	1,670,000	<0.050	55.6	0.132	5.21	23.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	D	10.3	0.208	0.31	2.78	<0.010	229	<0.010	5,020	<1.0	0.12	1.48	<30	<0.10	3.59	10,400	1.10	1.04	<0.40	<0.40	248,000	0.0064	<0.40	0.0383	0.69	4.4
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Mar-14	T	42,300	0.298	7.59	116	1.19	286	0.122	9,690	56.7	20.1	56.7	47,500	17.1	36.8	26,100	1,760	2.60	15.7	0.51	275,000	0.102	803	1.46	155	164
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	D	5.1	0.122	0.51	34.7	<0.010	523	<0.010	42,100	<1.0	<0.10	1.32	<30	<0.10	14.5	91,800	11.4	1.07	0.47	<0.40	898,000	0.0072	<0.40	0.0359	0.66	9.0
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Jun-14	T	3,820	0.169 J+	1.01	54.2	0.101	552	0.034	47,800	5.5	1.68	5.5	3,580	1.07	18.5	106,000	317	1.59	1.97	<0.40	952,000	0.0172	147	0.153	13.8	33.3
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-14	D	<5.0	<0.50	<2.0	259	<0.50	1,920	0.511	317,000	<0.50	0.212	1.55	<10	<0.30	32	676,000	371	<2.0	2.08	<2.0	5,040,000	<0.050	<5.0	0.094	<0.50	29.9
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	11-Sep-14	T	6,300	<0.50	<2.0	278	<0.50	1,970	0.437	324,000	9.28	2.95	8.6	6,170	1.93	35	699,000	793	<2.0	3.84	<2.0	5,160,000	<0.050	210	0.279	21.3	49.4
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	D	7.8	0.132	0.388	8.27	<0.0050	311	0.0107	20,700	<0.50	<0.050	0.94	<30	<0.050	8.06	41,800	1.04	0.913	0.32	<0.20	512,000	0.0026	<0.20	0.0536	0.484	27.6
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	3-Dec-14	T	2,440	0.160	0.918	19.0	0.100	323	0.0155	18,900	3.44	0.990	3.22	3,450	1.00	8.87	39,400	176	1.27	1.04	<0.20	502,000	0.0099	104	0.177	9.99	23.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	D	2.6	0.129	0.269	10.8	<0.0050	245	<0.0050	19,400	<0.50	<0.050	1.20	<30	0.069	4.87	43,900	0.44	0.667	0.45	<0.20	499,000	<0.0020	<0.20	0.0244	0.315	9.7
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	12-Mar-15	T	2,080	0.187	0.677	21.5	0.0750	269	<0.0050	19,800	3.10	0.862	3.39	2,890	0.818	5.86	43,100	156	1.20	0.98	<0.20	509,000	0.0090	83.9	0.129	7.77	12.8
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	D	<5.0	<0.50	<2.0	399	<0.50	1,790	0.436	309,000	<0.50	<0.050	1.28	<10	<0.30	33	666,000	42.5	<2.0	1.49	<2.0	5,130,000	<0.050	<5.0	<0.050	<0.50	26.6
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	15-Jun-15	T	3,260	<0.50	<2.0	366	<0.50	1,760	0.426	266,000	5.49	1.69	5.23	3,760	1.18	36	616,000	690	<2.0	3.28	<2.0	4,780,000	<0.050	131	0.229	12.1	47.7
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	D	<5.0	<0.50	<2.0	147	<0.50	1,680	0.444	299,000	<0.50	0.266	1.32	<10	<0.30	33	624,000	892	2.3	1.53	<2.0	4,740,000	0.056	<5.0	0.448	<0.50	44.5
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	10-Sep-15	T	7,900	<0.50	<2.0	168	<0.50	1,850	0.478	303,000	13.3	4.04	12.5	9,550	3.90	39	628,000	1,290	4.2	5.12	<2.0	5,050,000	0.088	285	0.933	29.6	65.6
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	D	<5.0	<0.50	<2.0	28.7	<0.50	550	0.063	77,200	<0.50	0.079	1.14	<10	<0.30	<20	147,000	71.1	<2.0	0.62	<2.0	1,450,000	<0.050	<5.0	<0.050	<0.50	32.8
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	7-Dec-15	T	2,810	<0.50	<2.0	39.3	<0.50	550	0.117	72,600	4.38	1.51	4.7	3,700	0.99	<20	139,000	290	<2.0	1.97	<2.0	1,400,000	<0.050	114	0.147	10.7	32.5
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	29-Feb-16	D	7.2	<0.50	<2.0	24.1	<0.50	1,570	0.129	156,000	<0.50	0.065	1.95	<10	<0.30	46	415,000	37.1	3.4	15.5	<2.0	3,620,000	<0.050	<5.0	0.931	0.62	39.8
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	29-Feb-16	T	29,000	<0.50	6.8	149	1.25	920	0.330	143,000	58.3	21.4	55.7	39,800	19.4	57	350,000	2,290	5.2	20.3	<2.0	2,550,000	0.152	622	2.86	131	177
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	D	<5.0	<0.50	<2.0	108	<0.50	1,500	0.206	214,000	<0.50	<0.050	1.57	<10	<0.30	39	522,000	1.52	<2.0	0.82	<2.0	3,890,000	<0.050	<5.0	0.231	<0.50	45.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	18-May-16	T	45,100	<0.50	7.1	213	1.21	1,420	0.562	208,000	60.9	24.7	66.8	47,700	23.5	77	514,000	3,860	7.1	23.0	<2.0	3,720,000	0.166	893	2.60	136	322
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	D	<5.0	<0.50	<2.0	151	<0.50	2,090	0.477	223,000	<0.50	<0.050	1.81	<10	<0.30	46	562,000	15.8	2.2	1.72	<2.0	4,630,000	0.078	<5.0	0.351	0.58	38.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	19-Aug-16	T	29,400	<0.50	5.0	240	0.98	2,220	0.721	219,000	43.7	15.1	44.0	30,600	15.9	64	554,000	2,430	5.5	22.2	<2.0	4,420,000	0.172	700	2.06	89.6	191
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Nov-16	D	<5.0	<0.50	<2.0	33.9	<0.50	640	0.440	76,200	<0.50	0.093	1.73	<10	<0.30	<20	180,000	322	<2.0	3.66	<2.0	1,580,000	<0.050	<5.0	0.113	<0.50	36.1
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	22-Nov-16	T	25,600	<0.50	5.0	104	0.89	720	0.857	88,700	54.9	16.8	52.0	26,900	13.5	41	214,000	2,970	4.0	20.7	<2.0	1,870,000	0.112	499	2.36	93.6	232
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	D	42.7	0.120	0.36	12.4	<0.010	301	0.025	16,200	<1.0	<0.10	1.20	<30	0.14	8.05	41,200	46.2	1.25	0.77	<0.40	517,000	0.0127	1.32	0.0696	0.57	5.5
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	14-Mar-17	T	3,000	0.188	0.89	20.5	0.090	304	0.045	15,000	7.5	1.28	5.4	3,270	1.50	9.60	37,700	235	1.58	2.15	<0.40	490,000	0.023	107	0.276	10.9	16.2
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	D	<5.0	<0.50	<2.0	65.5	<0.50	720	0.185	123,000	<0.50	<0.050	1.74	<10	<0.30	27	258,000	58.7	<2.0	2.31	<2.0	1,860,000	<0.050	<5.0	0.166	0.54	21.1
P10-3I	Porewater EAZ	P10-3	USAT	EB	0.6-0.8	0.6	0.8	Weathered Colluvium	---	6-Jun-17	T	3,220	<0.50	<2.0	92.0	<0.50	700	0.267	125,000	8.90	1.99	7.60	4,180	1.79	31	255,000	583	2.1	5.74	<2.0	1,900,000	0.059	132	0.382	12.9	34.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	28-Sep-11	---	Well Not Sampled																								
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	8-Dec-11	D	<5.0	<0.50	<2.0	27.9	<0.50	<10	0.057	35,100	<0.50	0.499	0.75	<10	<0.30	<20	16,400	1,410	6.9	8.46	<2.0	103,000	<0.050	<5.0	0.611	<0.50	184
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	27-Mar-12	D	8.5	<0.50	<2.0	116	<0.50	1,210	0.878	215,000	0.62	2.92	1.74	17	1.92	36	329,000	5,350	2.8	11.7	<2.0	2,610,000	0.082	<5.0	0.709	<0.50	501
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-12	D	3.6	0.026	0.232	17.6	<0.0050	118	0.0217	34,900	<0.50	0.368	0.71	<30	<0.050	3.65	23,700	655	2.51	1.31	<0.20	216,000	<0.0020	<0.20	0.214	0.345	33.4
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Sep-12	D	5.0	0.019	0.212	21.2	<0.0050	109	<0.0050	36,200	<0.50	0.140	0.70	<30	<0.050	6.52	25,500	335	2.65	0.77	<0.20	199,000	0.0035	<0.20	0.23	0.341	13.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Dec-12	D	<1.0	0.059	0.207	27.3	<0.0050	148	<0.0050	46,700	<0.50	<0.050	0.72	<30	<0.050	9.98	42,100	15.6	0.700	1.05	<0.20	251,000	0.0039	<0.20	0.173	0.139	75.1
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	13-Mar-13	D	1.5	0.024	0.172	17.8	<0.0050	124	0.110	43,000	<0.50	0.114	1.07	<30	<0.050	5.69	37,200	24.2	0.681	0.62	<0.20	226,000	0.0020	<0.20	0.178	0.165	30.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Jun-13	D	<1.0	0.023	0.193	9.85	<0.0050	64.3	<0.0050	32,900	<0.50	0.074	0.56	<30	<0.050	1.59	14,600	320	1.70	0.81	<0.20	52,700	0.0024	<0.20	0.132	0.216	21.8
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	17-Sep-13	D	14.2	0.024	0.186	22.2	<0.0050	92.4	0.0086	38,400	<0.50	0.163	0.84	<30	0.081	3.50	23,700	203	1.78	1.04	<0.20	142,000	0.0024	0.32	0.147	0.343	34.5
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	16-Dec-13	D	1.2	0.023	0.23	38.2	<0.0050	160	0.0148	53,100	<0.50	0.102	0.59	<30	<0.050	6.71	48,000	186	0.704	0.85	<0.20	323,000	0.0022	<0.20	0.193	0.211	74.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Mar-14	D	<2.0	0.051	0.16	38.7	<0.010	209	0.029	48,700	<1.0	0.18	1.05	<30	<0.10	7.86	50,800	529.00	1.11	1.24	<0.40	403,000	<0.0040	<0.40	0.204	0.23	254
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Jun-14	D	2.9	0.015	0.253	20.1	<0.0050	134	<0.0050	39,700	<0.50	0.071	0.74	<30	<0.050	4.08	25,900	286	1.14	0.51	<0.20	206,000	0.0025	0.23	0.189	0.218	78.7
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	11-Sep-14	D	3.3	0.039	0.16	111	<0.010	206	0.086	93,300	<1.0	0.16	1.07	<30	<0.10	10.6	87,500	905	1.58	2.14	<0.40	590,000	0.0102	<0.40	0.457	0.29	194
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	3-Dec-14	D	<1.0	0.017	0.152	31.8	<0.0050	93.2	0.0092	42,000	<0.50	<0.050	0.68	<30	<0.050	2.55	26,600	107	0.574	0.67	<0.20	181,000	0.0043	<0.20	0.303	0.285	28.6
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	12-Mar-15	D	1.6	0.029	0.133	14.2	<0.0050	55.7	<0.0050	33,900	<0.50	<0.050	0.87	<30	<0.050	0.83	14,900	48.5	0.689	0.38	<0.20	65,300	0.0026	<0.20	0.212	0.239	22.6
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	15-Jun-15	D	<2.0	0.048	0.17	133	<0.010	155	0.104	102,000	<1.0	<0.10	0.54	<30	<0.10	6.25	78,700	874	1.50	1.98	<0.40	509,000	0.0109	<0.40	0.506	0.22	57.9
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	10-Sep-15	D	<1.0	0.033	0.136	206	<0.0050	245	0.131	163,000	<0.50	0.449	0.51	<30	<0.050	7.79	133,000	2,420	1.55	3.79	<0.20	809,000	0.0157	<0.20	0.586	0.318	47.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	7-Dec-15	D	2.3	0.096	0.918	30.1	<0.0050	180	0.0235	38,500	<0.50	<0.050	1.09	<30	<0.050	7.18	31,300	130	0.897	0.84	<0.20	261,000	0.0054	<0.20	0.322	1.44	22.8
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	29-Feb-16	D	2.6	0.089	0.197	14.9	<0.0050	90.7	0.0206	29,200	<0.50	<0.050	0.47	<30	<0.050	2.30	20,700	29.6	0.641	0.27	<0.20	140,000	<0.0020	<0.20	0.304	0.321	30.4
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	18-May-16	D	1.1	0.079	0.171	14.8	<0.0050	118	0.0129	36,100	<0.50	<0.050	0.89	<30	<0.050	3.73	26,200	29.5	0.646	0.30	<0.20	180,000	0.0035	<0.20	0.278	0.332	27.3
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	19-Aug-16	D	2.8	0.059	0.225	40.7	<0.0050	139	0.0222	54,500	<0.50	<0.050	0.98	<30	<0.050	4.75	48,700	98.9	1.06	0.49	<0.20	323,000	0.0055	<0.20	0.457	0.376	24.5
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	22-Nov-16	D	16.6	0.134	0.211	26.4	<0.0050	139	0.0201	42,000	<0.50	0.055	0.85	<30	0.18	4.33	37,900	33.5	0.704	0.25	<0.20	282,000	0.0034	0.61	0.437	0.456	24.2
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	14-Mar-17	D	19.5	0.027	0.206	25	<0.0050	135	0.0177	43,400	<0.50	<0.050	0.54	<30	0.13	4.16	36,000	19.1	0.6	0.22	<0.20	238,000	0.0021	<0.20	0.306	0.379	12.4
P10-3D	Porewater	P10-3	USAT	EB	1.1-1.3	1.1	1.3	Weathered Colluvium	---	6-Jun-17	D	<1.0	0.096	0.211	16.1	<0.0050	99.6	0.0264	37,800	<0.50	<0.050	1.93	<30	0.20	3.01	26,300	63.9	0.811	0.29	<0.20	172,000	0.0031	<0.20	0.235	0.436	12.2
Culvert Runoff Area																																				
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	6-Oct-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Dec-11	D	9.9	<0.50	<2.0	75.7	<0.50	1,100	0.071	117,000	<0.50	0.262	<0.50	26	<0.30	35	292,000	110	2.3	1.12 J+	<2.0	2,620,000	<0.050	<5.0	1.16	<0.50	63.1
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	14-Mar-12	D	9.6	<0.50	<2.0	88.5	<0.50	1,040	<0.050	109,000	<0.50	0.446	1.33	11	<0.30	32	290,000	85.5	<2.0	5.69	<3.0	2,320,000	0.056	<5.0	0.549	<0.50	17.7
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	7-Jun-12	D	14.2	<0.50	<2.0	163	<0.50	660	0.110	243,000	<0.50	0.934	0.92	1,970	<0.30	<20	323,000	683	<2.0	3.63	<2.0	2,110,000	<0.050	<5.0	0.526	<0.50	13.6
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	14-Sep-12	D	<5.0	<0.50	<2.0	563	<0.50	1,320	0.129	512,000	<0.50	1.47	0.88	7,810	<0.30	<20	775,000	1,170	<2.0	2.66	<2.0	5,710,000	<0.050	<5.0	0.223	<0.50	7.2
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Dec-12	D	<5.0	<0.50	<2.0	115	<0.50	1,380	<0.050	70,500	<0.50	0.094	0.67	18	<0.30	21	172,000	35.2	2.9	0.87	<2.0	1,730,000	<0.050	<5.0	0.550	<0.50	21.1
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	15-Mar-13	D	11.0	0.072	0.448	59.1	<0.0050	458	0.0936	21,500	<0.50	0.223	1.82	145	<0.050	6.67	35,700	51.8	1.83	1.10	<0.20	492,000	0.0027	0.51	0.0984	1.05	5.0
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Jun-13	D	<5.0	<0.50	<2.0	133	<0.50	620	0.070	115,000	<0.50	0.436	2.85	428	<0.30	<20	194,000	290	<2.0	2.52	<2.0	1,260,000	<0.050	<5.0	0.167	<0.50	9.9
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Jun-13	T	2,930	<0.50	2.7	291	<0.50	730	0.059	128,000	20.1	1.90	11.5	11,200	1.88	21	255,000	382	2.3	5.43	<2.0	1,910,000	<0.050	121	0.530	15.5	64.4
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	18-Sep-13	D	<5.0	<0.50	<2.0	231	<0.50	1,610	0.101	376,000	<0.50	0.762	3.75	918	<0.30	29	684,000	559	<2.0	3.00	<2.0	5,400,000	<0.050	<5.0	0.297	<0.50	9.0
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	18-Sep-13	T	240	<0.50	<2.0	350	<0.50	1,620	0.096	395,000	0.93	1.62	7.56	4,030	<0.30	26	716,000	908	<2.0	4.34	<2.0	5,700,000	<0.050	10.2	0.366	1.07	7.2
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	16-Dec-13	D	8.4	<0.50	<2.0	89.0	<0.50	1,230	0.068	105,000	<0.50	0.190	0.80	26	<0.30	22	280,000	48.7	<2.0	2.36	<2.0	2,300,000	<0.050	<5.0	0.709	<0.50	4.8
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	16-Dec-13	T	6,060	<0.50	2.0	125	0.56	1,390	0.077	111,000	6.60	1.80	6.28	7,730	5.06	32	317,000	276	3.3	2.62	<2.0	2,670,000	0.062	77.7	2.10	11.8	14.6
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Mar-14	D	6.9	<0.50	<2.0	46.5	<0.50	520	<0.050	31,600	<0.50	0.121	1.12	12	<0.30	<20	68,400	16.4	<2.0	1.83	<2.0	789,000	<0.050	<5.0	0.344	<0.50	3.9
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	13-Mar-14	T	4,330	<0.50	3.1	198	<0.50	510	<0.050	31,200	48.6	1.97	7.65	10,400	2.97	<20	69,600	219	3.2	4.55	<2.0	773,000	<0.050	93.5	1.18	15.2	12.1
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	10-Jun-14	D	<5.0	<0.50	<2.0	76.9	<0.50	740	<0.050	77,200	<0.50	0.079	1.60	<10	<0.30	<20	186,000	25.9	<2.0	6.40	<2.0	1,420,000	<0.050	<5.0	0.307	<0.50	8.0
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	10-Jun-14	T	940	<0.50	<2.0	141	<0.50	690	<0.050	87,700	8.11	0.692	3.08	2,730	0.83	<20	195,000	148	<2.0	4.14	<2.0	1,420,000	<0.050	27.6	0.526	3.92	4.7
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Sep-14	D	<5.0	<0.50	<2.0	265	<0.50	1,510	0.093	401,000	<0.50	1.07	5.5	2,610	<0.30	32	665,000	601	<2.0	2.69	<2.0	5,120,000	<0.050	<5.0	0.383	<0.50	70.8
P14-3S	Porewater EAZ	P14-3	NA	CL	0.3-0.5	0.3	0.5	Beach sand	---	9-Sep-14	T	1,490	<0.50	<2.0	334	<0.50	1,390	0.093	399,000	8.79	1.94	11.6	6,360	1.10	28	646,000	841	<2.0	3.60	<2.0	4,920,000	0.054	35.2	0.741	3.92	91.8
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	6-Oct-11	---	Well Not Sampled - Insufficient Water for Analysis																								
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Dec-11	D	<6.0	<0.020	0.5	73.3	<0.010	293	0.026	106,000	<1.0	0.48	<1.0	<30	<0.10	<20	63,300	533	0.47 J+	0.83	<0.40	541,000	<0.0040	<0.40	0.534	0.57	<6.0
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	12-Mar-12	D	<6.0	0.029	0.53	47.8	<0.010	271	0.014	85,300	<1.0	0.28	<1.0	<30	<0.10	4.59	64,500	439	0.72	0.54	<0.40	456,000	<0.0040	<0.40	0.607	1.66	<6.0
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	7-Jun-12	D	<5.0	<0.50	<2.0	290	<0.50	440	0.073	265,000	<0.50	0.972	<0.50	2,210	<0.30	<20	284,000	1,350	<2.0	0.88	<2.0	1,770,000	<0.050	<5.0	0.474	0.81	9.7
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	14-Sep-12	D	<5.0	<0.50	<2.0	831	<0.50	1,250	0.055 J	494,000	<0.50	0.993	0.55	7,120	<0.30	<20	732,000	1,410	<2.0	0.88 J	<2.0	5,350,000	<0.050	<5.0	0.175	<0.50	7.8
P14-3I	Porewater EAZ	P14-3	NA	CL	0.40-0.7	0.40	0.7	Beach sand	---	10-Dec-12	---	Well Destroyed																								
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	6-Oct-11	---	Well Not Sampled																								
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Dec-11	D	<6.0	0.029	0.9	57.5	<0.010	230	0.02	62,700	<1.0	0.85	<1.0	503	<0.10	<20	54,500	678	1.99	1.9	<0.40	507,000	0.0154	<0.40	1.08	0.23	45.4
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	14-Mar-12	D	6,450	0.109	1.90	59.2	0.189	151	0.105	37,600	6.5	4.05	11.2	10,400	4.30	8.04	32,300	567	2.31	8.42	<0.40	217,000	0.0835	163	1.47	28.2	52.7
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	7-Jun-12	D	2.7	0.033	1.43	143	<0.010	166	0.028	163,000	<1.0	1.42	<0.40	6,780	<0.10	7.33	138,000	1,420	1.29	1.33	<0.40	642,000	<0.0040	<0.40	0.683	0.40	8.0
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	14-Sep-12	D	<5.0	<0.50	<2.0	841	<0.50	670	<0.050	496,000	<0.50	2.51	<0.50	18,600	<0.30	<20	595,000	2,760	<2.0	1.38	<2.0	3,980,000	<0.050	<5.0	0.758	0.54	7.2
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Dec-12	D	<2.0	0.060	0.51	74.0	<0.010	829	<0.010	52,200	<1.0	0.42	<0.40	354	<0.10	4.94	66,500	284	2.53	0.84	<0.40	783,000	<0.0040	<0.40	0.604	0.37	15.5
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	15-Mar-13	D	5.9	0.027	0.918	41.2	<0.0050	289	0.131	33,700	<0.50	0.380	0.78	1,070	<0.050	3.26	35,800	188	1.78	0.74	<0.20	372,000	<0.0020	0.32	0.360	1.05	4.8
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Jun-13	D	3.4	0.052	1.10	115	<0.010	319	0.013	87,100	<1.0	0.54	0.75	3,800	<0.10	8.83	111,000	470	1.15	0.86	<0.40	771,000	<0.0040	<0.40	0.260	0.48	20.4
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Jun-13	T	5,820	0.131	2.81	173	0.205	323	0.056	100,000	5.5	3.04	9.4	13,900	2.42	11.3	128,000	833	1.24	3.30	<0.40	848,000	0.0302	197	0.519	22.9	39.5
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	18-Sep-13	D	<5.0	<0.50	<2.0	641	<0.50	1,110	<0.050	430,000	<0.50	1.56	2.93	16,600	<0.30	<20	621,000	1,640	<2.0	1.24	<2.0	4,260,000	<0.050	<5.0	0.376	0.75	5.8
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	19-Sep-13	T	116	<0.50	<2.0	645	<0.50	1,040	<0.050	394,000	<0.50	1.57	<0.50	12,100	<0.30	<20	582,000	1,570	<2.0	1.07	<2.0	4,390,000	<0.050	5.5	0.312	1.07	28.0
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	16-Dec-13	D	5.5	0.027	1.01	67.5	<0.010	511	<0.010	57,700	<1.0	0.43	<0.40	2,490	<0.10	3.75	77,300	264	0.97	0.49	<0.40	780,000	<0.0040	<0.40	0.237	0.69	3.2
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	16-Dec-13	T	4,500	0.113 J+	1.96	95.5	0.126	442	0.048	41,300	3.9	1.88	6.9	10,700	1.68	6.14	58,300	221	1.16	2.45	<0.40	574,000	0.0180	136	0.382	17.7	33.1
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Mar-14	D	6.6	0.023	0.76	33.4	<0.010	262	<0.010	32,500	<1.0	0.31	0.53	1,580	<0.10	2.35	37,900	156	1.16	0.47	<0.40	349,000	<0.0040	<0.40	0.209	1.23	6.5
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	13-Mar-14	T	1,370	0.047 J+	0.98	41.4	0.042	271	<0.010	30,400	1.3	0.82	2.4	3,910	0.54	3.33	35,800	172	1.17	0.87	<0.40	339,000	0.0068	56.1	0.256	7.36	8.6
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	10-Jun-14	D	5.8	0.022	1.47	49.7	0.0056	237	<0.0050	39,600	<0.50	0.254	0.39	2,490	<0.050	4.01	43,300	232	1.15	0.48	<0.20	316,000	<0.0020	0.25	0.126	1.28	3.6
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	10-Jun-14	T	713	<0.050	1.99	76.2	0.0351	245	<0.0050	39,500	0.87	0.605	1.22	4,580	0.365	4.81	43,600	267	1.16	0.66	<0.20	320,000	0.0026	26.6	0.188	6.21	5.4
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-Sep-14	D	<5.0	<0.50	<2.0	411	<0.50	520	<0.050	253,000	<0.50	0.680	<0.50	8,460	<0.30	<20	333,000	728	<2.0	0.66	<2.0	2,490,000	<0.050	<5.0	0.161	0.74	20.3
P14-3D	Porewater EAZ	P14-3	NA	CL	0.9-1.1	0.9	1.1	Beach sand	Colluvium	9-Sep-14	T	2,740	<0.50	<2.0	762	<0.50	780	<0.050	404,000	2.33	2.21	4.41	18,300	1.01	<20	563,000	1,210	<2.0	2.06	<2.0	4,300,000	<0.050	123	0.307	12.2	17.5
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	14-Mar-12	D	9.6	<0.50	<2.0	21.1	<0.50	910	0.089	197,000	<0.50	0.504	1.44	<10	<0.30	44	386,000	1,980	58.0	2.92	<2.0	2,830,000	0.278	<5.0	9.17	1.32	31.8
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Jun-12	D	<5.0	<0.50	<2.0	26.4	<0.50	1,180	0.389	308,000	<0.50	0.403	2.49	<10	<0.30	59	534,000	4,830	77.8	2.80	<2.0	3,980,000	0.381	<5.0	11.7	0.95	28.4
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	14-Sep-12	D	<5.0	<0.50	<2.0	33.3	<0.50	1,630	0.209	356,000	<0.50	0.587	1.88	<10	<0.30	69	647,000	6,210	73.1	3.38	<2.0	4,590,000	0.646	<5.0	10.8	0.89	30.3
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	12-Oct-12	D	<5.0	<0.50	<2.0	42.0	<0.50	1,770	<0.050	387,000	<0.50	0.409	0.80	332	<0.30	73	734,000	2,380	35.0	2.08	<2.0	5,420,000	0.206	<5.0	11.2	<0.50	42.6
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	8-Nov-12	D	118	<0.50	<2.0	45.9	<0.50	1,650	0.088	406,000	<0.50	0.350	1.03	215	<0.30	76	805,000	1,710	21.6	1.45	<2.0	5,680,000	0.231	<5.0	13.6	0.68	29.8
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Dec-12	D	<5.0	<0.50	<2.0	31.3	<0.50	2,160	<0.050	349,000	<0.50	0.253	0.88	<10	<0.30	64	613,000	2,760	55.8	3.93	<2.0	5,000,000	0.242	<5.0	12.3	<0.50	91.4
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Jan-13	---	Well Not Sampled																								
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	15-Mar-13	D	<10	<0.50	<2.0	22.4	<0.50	1,610	<0.050	258,000	<5.0	<0.50	<2.0	<100	<0.50	50	491,000	152	35.6	<2.0	<2.0	4,440,000	0.100	<5.0	10.9	0.57	18
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	14-Jun-13	D	<5.0	<0.50	<2.0	21.1	<0.50	1,760	<0.050	213,000	<0.50	0.160	0.67	12	<0.30	59	430,000	924	64.0	0.98	<2.0	3,920,000	0.218	<5.0	8.79	0.69	32.3
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	18-Sep-13	D	<5.0	<0.50	<2.0	20.6	<0.50	1,930	<0.050	249,000	<0.50	0.221	3.46	<10	<0.30	73	552,000	547	46.6	1.09	<2.0	4,530,000	0.332	<5.0	11.5	<0.50	59.4
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	16-Dec-13	D	11.7	<0.50	<2.0	36.2	<0.50	1,770	0.216	337,000	<0.50	0.102	1.08	17	<0.30	52	751,000	229	17.1	0.98	<2.0	5,180,000	0.351	<5.0	9.75	0.55	20.8
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	13-Mar-14	D	<5.0	<0.50	<2.0	30.5	<0.50	1,870	<0.050	255,000	<0.50	0.105	0.89	<10	<0.30	49	565,000	9.76	17.4	0.82	<2.0	4,560,000	0.060	<5.0	9.86	0.55	9.9
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	10-Jun-14	D	<5.0	<0.50	<2.0	12.9	<0.50	1,750	<0.050	124,000	<0.50	0.109	1.57	15	<0.30	46	274,000	123	44.2	0.78	<2.0	3,030,000	0.175	<5.0	6.34	0.94	23.4
P14-12I	Porewater	P14-12	NA	CL	1.2-1.4	1.2	1.4	Beach sand	---	9-Sep-14	D	<5.0	<0.50	<2.0	29.2	<0.50	1,950	<0.050	268,000	<0.50	0.063	0.90	<10	<0.30	70.0	592,000	758	36.8	0.89	<2.0	4,890,000	0.447	<5.0	8.95	0.84	16.2
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	7-Oct-11	---	Well Not Sampled																								
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Dec-11	D	<5.0	<0.50	<2.0	23.3	<0.50	480	<0.050	142,000	<0.50	0.437	<0.50	<10	<0.30	29	252,000	3,720	74.3	2.7 J+	<2.0	1,540,000	<0.050	<5.0	6.09	0.53	20.2
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Mar-12	D	<30	0.10	<0.50	17.2	<0.050	520	<0.050	116,000	<5.0	<0.50	<5.0	<60	<0.50	26.6	202,000	1,500	58.9	<2.0	<2.0	1,400,000	0.056	<2.0	5.72	0.57	34
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	8-Jun-12	D	<5.0	<0.50	<2.0	14.8	<0.50	550	0.134	128,000	<0.50	0.148	1.06	16	<0.30	30	205,000	2,340	65.1	1.28	<2.0	1,450,000	<0.050	<5.0	5.30	0.62	7.9
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	14-Sep-12	D	<5.0	<0.50	<2.0	24.0	<0.50	680	<0.050	173,000	<0.50	0.334	0.52	10	<0.30	41	290,000	5,350	58.5	1.52	<2.0	1,660,000	0.064	<5.0	6.22	<0.50	6.2
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	15.8	<0.50	680	<0.050	180,000	<0.50	0.128	0.86	<10	<0.30	41	307,000	872	33.7	0.96	<2.0	1,850,000	0.070	<5.0	6.70	<0.50	21.2
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	<2.0	50.3	<0.50	930	<0.050	244,000	<0.50	0.638	0.60	11	<0.30	45	387,000	6,060	55.8	2.23	<2.0	1,990,000	0.069	<5.0	8.56	0.70	10.9
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	27.5	<0.50	570	<0.050	235,000	<0.50	0.235	<0.50	17	<0.30	33	402,000	1,090	24.6	2.33	<2.0	1,970,000	0.067	<5.0	5.37	<0.50	24.4
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	35.7	<0.50	610	<0.050	228,000	<0.50	0.102	0.71	<10	<0.30	39	371,000	9.58	10.8	0.53	<2.0	2,050,000	<0.050	<5.0	7.80	<0.50	11.2
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	18.0	<0.50	820	<0.050	175,000	<0.50	0.142	1.14	10	<0.30	34	278,000	1,450	46.7	2.06	<2.0	1,570,000	0.125	<5.0	5.79	<0.50	23.7
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	<2.0	16.9	<0.50	800	<0.050	172,000	<0.50	0.165	3.78	<10	<0.30	35	283,000	861	19.8	0.83	<2.0	1,710,000	<0.050	<5.0	6.07	<0.50	21.3
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	16-Dec-13	D	5.0	<0.50	<2.0	43.0	<0.50	720	<0.050	253,000	<0.50	0.336	<0.50	27	<0.30	36	429,000	5,610	31.0	1.59	<2.0	2,350,000	0.052	<5.0	6.43	<0.50	9.7
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	13-Mar-14	D	<5.0	<0.50	<2.0	41.2	<0.50	790	<0.050	230,000	<0.50	0.125	0.84	10.0	<0.30	37	388,000	793	10.6	1.00	<2.0	2,150,000	0.064	<5.0	6.51	<0.50	15.4
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	10-Jun-14	D	<5.0	0.55	<2.0	25.6	<0.50	760	<0.050	158,000	<0.50	0.110	1.74	<10	<0.30	34	276,000	5.49	13.7	0.70	<2.0	1,860,000	<0.050	<5.0	6.63	<0.50	42.1
P14-12D	Porewater	P14-12	NA	CL	1.5-1.7	1.5	1.7	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	<2.0	20.5	<0.50	860	<0.050	138,000	<0.50	0.062	0.84	<10	<0.30	34	231,000	30.4	21.5	<0.50	<2.0	1,930,000	<0.050	<5.0	5.52	<0.50	12.9
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Oct-11	D	6.2	<0.50	5.3	33.2	<0.50	320	<0.050	66,700	<0.50	0.196	<0.50	159	<0.30	24	69,900	460	<2.0	0.57	<3.0	628,000	<0.050	<5.0	0.207	0.52	<3.0
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	D	3.5	0.112	1.45	18.6	<0.0050	183	0.0068	29,600	<0.50	0.177	<0.50	<30	<0.050	<20	29,200	71.1	1.42	0.62	<0.20	264,000	<0.0020	<0.20	0.314	0.444	20.1
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	D	5.2	0.063	1.66	14.5	<0.0050	187	<0.0050	22,300	<0.50	0.338	<0.50	60	<0.050	9.20	22,700	376	0.745	0.25	<0.30	206,000	<0.0020	<0.20	0.202	0.669	<3.0
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	D	<5.0	<0.50	<2.0	187	<0.50	560	<0.050	146,000	<0.50	0.284	0.65	209	<0.30	25	202,000	229	<2.0	0.71	<2.0	1,430,000	<0.050	<5.0	0.432	<0.50	4.1
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	D	2.1	0.056	0.77	48.3	<0.010	320	<0.010	48,900	<1.0	<0.10	<0.40	<30	<0.10	11.8	67,300	23.8	0.81	<0.40	<0.40	525,000	0.0051	<0.40	0.218	0.41	<2.0
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	D	2.0	0.078	1.03	15.9	<0.0050	172	<0.0050	22,200	<0.50	<0.050	0.32	<30	<0.050	4.46	23,900	8.19	0.865	0.47	<0.20	190,000	<0.0020	<0.20	0.265	0.660	2.3
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	D	1.8	0.027	0.810	11.3	<0.0050	113	<0.0050	20,100	<0.50	<0.050	<0.20 UJ	<30	<0.050	3.09	14,900	15.1	0.575	0.23	<0.20	77,500	<0.0020	<0.20	0.150	0.346	<1.0 UJ
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	D	2.8	0.035	0.875	44.4	<0.0050	191	0.0069	55,200	<0.50	0.160	0.38	223	<0.050	6.19	45,000	231	0.668	0.63	<0.20	218,000	<0.0020	<0.20	0.159	0.094	2.2
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	D	2.6	0.032	0.741	33.6	<0.0050	182	0.0069	41,300	<0.50	0.120	0.45	35	<0.050	6.79	38,800	45.9	0.630	0.35	<0.20	243,000	<0.0020	<0.20	0.136	0.143	4.6
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	D	1.8	0.035	0.786	38.2	<0.0050	151	<0.0050	51,100	<0.50	0.091	0.22	37	<0.050	4.68	39,600	133	0.560	0.60	<0.20	162,000	<0.0020	<0.20	0.163	0.354	2.3
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	D	1.2	0.033	0.810	14.1	<0.0050	114	<0.0050	24,300	<0.50	0.057	0.62	<30	<0.050	2.35	13,500	2.36	0.494	0.23	<0.20	61,000	<0.0020	<0.20	0.136	0.473	4.3
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	D	2.1	0.026	0.820	12.7	<0.0050	104	<0.0050	22,700	<0.50	0.102	0.31	<30	<0.050	2.18	9,680	119	0.606	0.34	<0.20	47,400	<0.0020	<0.20	0.0988	0.204	2.6
P14R-12I	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	D	1.8	0.058	0.677	23.6	<0.0050	105	0.0083	31,400	<0.50	0.096	0.20	59	<0.050	1.78	13,500	173	0.304	0.29	<0.20	49,700	<0.0020	<0.20	0.0673	0.625	2.8
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	D	7.6	<0.50	<2.0	65.4	<0.50	1,440	<0.050	146,000	<0.50	<0.050	0.72	<10	<0.30	64	324,000	374	3.6	0.63	<2.0	2,930,000	<0.050	<5.0	1.85	0.90	8.6
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	D	<5.0	<0.50	<2.0	102	<0.50	1,620	0.174 J	213,000	<0.50	0.050	0.88	12	<0.30	76	487,000	66.0	4.3	0.66	<2.0	3,750,000	<0.050	<5.0	1.56	0.69	7.7 J
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	D	7.6 J	<0.50	<2.0	108	<0.50	2,370	0.285	266,000	<0.50	<0.050	0.93 J	15 J	<0.30	75	714,000	25.4	4.2	0.95	<2.0	5,360,000	0.061	<5.0	0.829	1.01	4.6 J
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12	D	<5.0	<0.50	<4.0	109	<0.50	2,500	0.272	306,000	<0.50	<0.050	1.04 J	14 J	<0.30	71	814,000	25.1	4.7	2.29 J	<2.0	6,460,000	<0.050	<5.0	0.967	0.89	5.5
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12	D	<5.0	<0.50	<2.0	85.1	<0.50	1,570	0.068	186,000	<0.50	<0.050	0.82 J	10 J	<0.30	52	456,000	45.3	3.4	<0.50	<2.0	3,960,000	<0.050	<5.0	0.672	0.52	4.1 J
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	31.9	<0.50	1,310	<0.050	93,200	<0.50	<0.050	3.10	<10	<0.30	29	228,000	6.66	4.7	0.73	<2.0	2,070,000	<0.050	<5.0	0.951	1.17	4.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	32.0	<0.50	1,030	<0.050	99,100	<2.5	<0.25	<1.0	<50	<0.30	33	237,000	4.1	4.0	<1.0	<2.0	2,060,000	<0.050	<5.0	0.680	0.79	<5.0
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	62.4	<0.50	1,930	0.146	179,000	<0.50	0.090	1.23	<10	<0.30	59	438,000	2.24	3.9	0.96	<2.0	3,000,000	<0.050	<5.0	0.713	1.05	5.3
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	D	<5.0	<0.50	<2.0	85.9	<0.50	2,190	0.167	285,000	<0.50	0.071	1.03	<10	<0.30	68	748,000	1.27	3.9	0.87	<2.0	5,780,000	<0.050	<5.0	1.50	0.99	6.1
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	54.0	<0.50	1,760	0.133	206,000	<0.50	0.073	0.92	<10	<0.30	47	557,000	1.16	3.9	1.21	<2.0	4,270,000	<0.050	<5.0	1.65	0.96	4.1
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	22.9	<0.50	1,100	<0.050	81,900	<0.50	0.057	0.89	<10	<0.30	30.0	218,000	0.51	4.2	<0.50	<2.0	1,980,000	<0.050	<5.0	1.02	0.89	<3.0
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	31.0	<0.50	1,050	<0.050	102,000	<0.50	0.086	1.17	<10	<0.30	41	266,000	2.92	3.1	0.58	<2.0	2,120,000	<0.050	<5.0	0.483	1.18	4.1
P14R-12D	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	D	<5.0	<0.50	<2.0	95.2	<0.50	2,060	0.203	257,000	<0.50	<0.050	1.28	<10	<0.30	81	737,000	1.35	3.4	0.83	<2.0	5,340,000	0.055	<5.0	0.724	1.08	4.2
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-12	D	9.4	<0.50	<2.0	28.0	<0.50	1,770	<0.050	100,000	<0.50	0.391	1.02	<10	<0.30	40	262,000	45.6	7.2	1.14	<2.0	3,350,000	<0.050	<5.0	1.99	1.32	3.4
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	8-Jun-12	D	9.8	<0.50	<2.0	76.5	<0.50	1,990	0.445	302,000	0.60	<0.050	3.60	28	<0.30	69	697,000	2.22	5.7	1.39	<2.0	5,980,000	<0.050	<5.0	2.27	1.60	11.2
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	92.8	<0.50	2,550	0.289	309,000	<0.50	<0.050	1.76	<10	<0.30	79	736,000	2.72	6.9	1.22	<2.0	5,620,000	0.093	<5.0	2.64	1.50	8.5
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	7-Nov-12	---	Well Not Sampled - tide too high																								
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	63.2	<0.50	2,330	0.102	205,000	<0.50	<0.050	0.97	<10	<0.30	54	564,000	3.32	5.5	0.75	<2.0	5,100,000	<0.050	<5.0	1.81	1.26	7.7
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	55.7	<0.50	2,470	0.093	189,000	<0.50	0.126	1.12	24	<0.30	61	509,000	5.17	5.8	4.27	<2.0	4,980,000	<0.050	<5.0	1.41	1.24	22.6
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	57.6	<0.50	2,420	0.238	191,000	<0.50	0.101	1.31	<10	<0.30	63	552,000	0.65	6.4	1.54	<2.0	5,280,000	<0.050	<5.0	1.24	1.34	7.3
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	60.3	<0.50	3,200	0.176	176,000	<0.50	0.059	1.36	<10	<0.30	79	533,000	3.00	7.6	2.19	<2.0	4,420,000	<0.050	<5.0	1.00	1.71	8.6
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	13-Jun-13	T	2,710	<0.50	<2.0	70.2	<0.50	3,180	0.214	179,000	3.60	1.21	5.10	3,340	1.03	84	530,000	60.6	7.4	3.51	<2.0	4,330,000	<0.050	104	1.10	10.4	17.1
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	17-Sep-13	D	7.3	<0.50	<2.0	105	<0.50	2,930	0.340	326,000	<0.50	0.198	1.62	10	<0.30	89	827,000	1.78	6.8	3.44	<2.0	6,180,000	<0.050	<5.0	1.51	1.58	14.8
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	17-Sep-13	T	42,000	0.59	11.1	290	1.26	2,920	0.533	345,000	60.6	20.4	77.9	56,400	17.2	144	855,000	1,010	6.8	44.4	<2.0	6,160,000	0.161	1,210	3.50	163	142
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	16-Dec-13	D	6.7	<0.50	<2.0	90.6	<0.50	2,530	0.370	319,000	<0.50	0.061	0.91	<10	<0.30	75	898,000	0.34	5.8	1.65	<2.0	6,810,000	<0.050	<5.0	1.29	1.33	6.6
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	16-Dec-13	T	18,600	0.56	5.0	157	<0.50	2,410	0.470	339,000	23.1	9.56	36.6	25,400	8.57	92	903,000	470	5.5	20.1	<2.0	6,970,000	0.108	644	1.94	63.4	68.6
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	44.4	<0.50	2,620	0.107	169,000	<0.50	0.072	0.64	<10	<0.30	60.0	496,000	0.95	7.0	1.33	<2.0	4,780,000	<0.050	<5.0	0.928	1.27	5.1
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	12-Mar-14	T	2,990	<0.50	<2.0	52.2	<0.50	2,440	0.093	158,000	3.24	1.23	4.58	3,380	1.05	60.0	463,000	60.7	6.8	3.38	<2.0	4,530,000	<0.050	111	1.00	10.5	10.7
P14-17S-A ^	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	16-Dec-13	T	9,620	0.55	2.6	123	<0.50	2,380	0.397	311,000	11.0	4.69	18.8	12,900	4.14	82	895,000	238	5.4	11.2	<2.0	6,580,000	0.071	354	1.63	31.7	34.0
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jun-14	D	<5.0	<0.50	<2.0	39.9	<0.50	2,250	<0.050	154,000	<0.50	<0.050	1.38	<10	<0.30	62	420,000	0.96	7.2	1.23	<2.0	3,430,000	<0.050	<5.0	0.806	1.68	3.8
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	9-Jun-14	T	1,840	<0.50	<2.0	61.5	<0.50	2,100	0.096	195,000	2.50	0.969	4.43	2,380	0.85	72	525,000	53.2	6.0	2.67	<2.0	3,900,000	<0.050	75.3	1.04	7.90	7.9
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-14	D	<5.0	<0.50	<2.0	94.0	<0.50	2,520	0.320	319,000	<0.50	<0.050	1.45	<10	<0.30	94	836,000	0.72	5.1	1.55	<2.0	6,020,000	0.078	<5.0	1.13	1.57	6.7
P14-17S	Porewater EAZ	P14-17	NA	CL	0.8-1.0	0.8	1.0	Colluvium	---	8-Sep-14	T	2,410	<0.50	<2.0	103	<0.50	2,410	0.341	321,000	2.15	0.987	4.32	2,710	1.12	98	834,000	50.4	4.9	2.96	<2.0	6,180,000	0.080	82.6	1.24	7.97	10.5
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	D	17.0	<1.5	<7.0	17.6	<1.5	3,780	<0.15	314,000	<1.5	0.35	<1.5	<30	<0.90	142	871,000	220	<6.0	1.8	<6.0	7,440,000	<0.15	<15	1.08	2.1	<9.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	D	5.4 J	<0.50	<11	57.8	<0.50	2,050	<0.050 UJ	246,000	<0.50 UJ	0.340	<0.50	11 J	<0.30	100	635,000	671	<2.0	2.12	<8.0	4,710,000	<0.050	<5.0	0.329	1.15	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Sep-12	D	12.8	<0.50	<4.0	142	<0.50	1,410	<0.050	219,000	<0.50	0.156	<0.50	48	<0.30	85	491,000	1,180	<2.0	0.84	<9.0	3,030,000	<0.050	<5.0	0.256	1.13	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Nov-12	---	Well Not Sampled - tide too high																								
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Dec-12	D	10.3	<0.50	<3.0	131	<0.50	1,160	<0.050	204,000	<0.50	0.133	2.29	58	<0.30	68	436,000	1,270	<2.0	2.47	<2.0	2,800,000	<0.050	<5.0	0.158	0.72	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	133	<0.50	1,020	<0.050	202,000	<0.50	0.120	<0.50	287	<0.30	70	414,000	994	<2.0	1.31	<2.0	2,730,000	<0.050	<5.0	0.147	<0.50	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	177	<0.50	1,030	0.067	178,000	<0.50	0.179	<0.50	138	<0.30	66	392,000	1,100	<2.0	0.64	<2.0	2,100,000	<0.050	<5.0	0.165	<0.50	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	17-Sep-13	D	6.6	<0.50	<2.0	136	<0.50	890	<0.050	172,000	<0.50	0.270	<0.50	90	<0.30	51	361,000	292	<2.0	0.71	<2.0	2,320,000	<0.050	<5.0	0.142	0.54	4.7
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	131	<0.50	740	<0.050	185,000	<0.50	0.147	<0.50	204	<0.30	51	376,000	380	<2.0	<0.50	<2.0	2,270,000	<0.050	<5.0	0.175	<0.50	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	116	<0.50	700	<0.050	162,000	<0.50	0.142	<0.50	167	<0.30	49	342,000	313	<2.0	<0.50	<2.0	2,100,000	<0.050	<5.0	0.229	0.62	<3.0
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	10-Jun-14	D	<5.0	<0.50	<2.0	103	<0.50	590	<0.050	163,000	<0.50	0.135	<0.50	113	<0.30	51	341,000	88.2	<2.0	0.76	<2.0	2,110,000	<0.050	<5.0	0.157	<0.50	3.5
P14-17I	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	8-Sep-14	D	<5.0	<0.50	<2.0	125	<0.50	610	<0.050	130,000	<0.50	0.080	0.65	22	<0.30	57	284,000	91.7	<2.0	0.72	<2.0	1,800,000	<0.050	<5.0	0.155	<0.50	3.5
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	D	12.4	<0.50	<2.0	4.0	<0.50	510	<0.050	34,700	<0.50	0.076	<0.50	80	<0.30	<20	48,600	88.8	<2.0	<0.50	<2.0	523,000	<0.050	<5.0	0.089	0.68	5.5
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	D	11.1	0.029	0.96	4.88	<0.010	402	0.013	41,900	<1.0	<0.10	<0.40	35	<0.10	9.89	57,000	120	0.12	0.57	0.48	544,000	<0.0040	0.80	0.0568	0.48	6.4
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	D	11.5	0.026	0.787	3.98	<0.0050	285	<0.0050	19,200	<0.50	<0.050	<0.20	<30	<0.050	4.35	33,500	33.2	1.91	0.26	0.77	294,000	<0.0020	0.43	0.0725	0.307	1.4
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-12	D	8.4	0.039	1.56	3.20	<0.0050	307	<0.0050	20,400	<0.50	<0.050	0.33	<30	<0.050	4.13	37,500	5.59	2.69	0.69	<0.20	348,000	<0.0020	0.23	0.107	0.928	5.8
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	D	15.2	0.017	1.04	2.62	<0.0050	206	0.0916	10,800	<0.50	0.104	0.64	<30	<0.050	2.43	18,800	0.79	1.65	0.40	<0.20	164,000	<0.0020	0.20	0.0714	0.375	2.8
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Jun-13	D	9.8	0.035 J	0.93	7.14	<0.010	448	<0.010	33,500	<1.0	<0.10	0.68	<30	<0.10	9.13	74,600	4.27	2.27	<0.40	<0.40	648,000	<0.0040	<0.40	0.168	0.29	4.2
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	17-Sep-13	D	8.9	0.015	1.21	4.98	<0.0050	283	0.0530 J	18,800	<0.50	0.127 J	<0.20	<30	<0.050	4.75	34,400	101	1.26	0.42 J	0.74	322,000	<0.0020	1.10	0.0702	0.286	2.9 J
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	16-Dec-13	D	17.7	0.080	1.04	2.72	<0.0050	254	<0.0050	16,100	<0.50	0.058	0.26	<30	<0.050	3.26	37,700	2.96	1.47	0.20	<0.50	288,000	<0.0020	<0.20	0.0877	0.236	3.7
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	18.4	0.020	0.906	1.50	<0.0050	248	<0.0050	10,700	<0.50	0.059	0.23	<30	<0.050	3.44	23,600	7.54	1.43	<0.20	<0.20	220,000	<0.0020	<0.20	0.0897	0.185	2.2
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	D	14.8	0.010	0.400	1.51	<0.0050	171	<0.0050	4,970	<0.50	<0.050	0.38	<30	<0.050	1.52	6,540	23.2	0.796	0.25	<0.20	81,200	<0.0020	<0.20	0.0382	<0.050	2.0
P14-17D	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	D	15.1	0.016	0.508	1.62	<0.0050	177	<0.0050	5,610	<0.50	0.061	0.31	<30	<0.050	1.46	6,850	22.1	0.760	0.20	<0.20	89,600	<0.0020	<0.20	0.0368	0.063	1.9
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Mar-12	D	8.4	0.372	1.35	3.09	<0.0050	197	<0.0050	18,000	<0.50	0.122	1.25	<30	0.081	9.39	23,600	0.40	1.19	0.53	<0.20	215,000	<0.0020	<0.20	0.241	6.52	<3.0
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	13-Sep-12	---	Well Not Sampled - Dry																								
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Dec-12	---	Well Not Sampled - Insufficient Water for Analysis																								
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	15-Mar-13	D	20.4	1.05	2.73	1.99	<0.0050	396	<0.0050	4,850	<0.50	0.098	2.78	<30	0.090	8.06	7,550	0.91	2.75	0.44	<0.20	284,000	0.0121	<0.20	0.188	15.2	3.1
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Jun-13	D	<5.0	<0.50	<2.0	123	<0.50	1,150	0.196	262,000	<0.50	0.124	2.13	<10	<0.30	61	515,000	4.94	<2.0	1.10	<2.0	3,630,000	<0.050	<5.0	0.730	2.73	12.5
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	14-Jun-13	T	208	0.62	<2.0	132	<0.50	1,210	0.197	269,000	<0.50	0.219	2.48	391	1.22	64	506,000	18.7	<2.0	1.20	<2.0	3,640,000	<0.050	9.6	0.767	4.02	11.7
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	18-Sep-13	D	<5.0	<0.50	<2.0	177	<0.50	2,860	0.347	328,000	<0.50	0.255	4.37	24	<0.30	85	849,000	9.03	<2.0	1.19	<2.0	7,270,000	<0.050	<5.0	0.902	1.82	16.1
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	18-Sep-13	T	16,600	1.02	13.0	276	0.69	2,970	0.585	361,000	15.3	15.9	74.9	31,700	94.8	116	862,000	1,520	2.7	17.7	<2.0	7,250,000	0.115	482	2.62	82.8	159
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	16-Dec-13	D	<5.0	0.93	<2.0	21.0	<0.50	950	<0.050	64,500	<0.50	0.100	1.46	<10	<0.30	25	151,000	1.03	3.4	0.60	<2.0	1,460,000	<0.050	<5.0	0.228	2.41	4.8
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	16-Dec-13	T	22,400	1.58	24.4	177	1.14	940	0.424	80,100	26.6	20.4	109	50,200	138	58	177,000	1,800	3.9	24.3	<3.0	1,480,000	0.174	640	3.36	122	176
P14.5-12S-A ^	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	16-Dec-13	T	9,980	1.61	9.3	82.3	<0.50	970	0.208	75,900	10.8	7.10	40.6	19,800	51.8	41	149,000	591	3.6	9.84	<2.0	1,430,000	0.055	355	1.19	50.6	73.1
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Mar-14	D	14.6	0.819	2.89	0.69	<0.0050	184	<0.0050	3,070	<0.50	0.151	2.88	<30	0.080	4.72	5,070	0.24	1.40	0.46	<0.20	93,600	<0.0020	0.22	0.120	12.1	4.1
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	12-Mar-14	T	247	0.676	2.31	1.62	0.0166	173	<0.0050	2,720	<0.50	0.233	4.13	423	1.16	5.09	4,870	11.7	1.34	0.49	<0.20	90,500	0.0020	8.05	0.134	9.98	<3.0
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	10-Jun-14	D	12.1	0.319	1.71	1.55	<0.0050	148	<0.0050	10,700	<0.50	0.164	2.02	<30	0.064	10.0	12,500	0.27	0.895	0.71	<0.20	118,000	<0.0020	<0.20	0.108	3.75	4.0
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	10-Jun-14	T	38.0	0.313	1.49	1.45	<0.0050	141	<0.0050	10,200	<0.50	0.134	1.93	65	0.310	10.8	12,100	2.85	0.952	0.55	<0.20	115,000	<0.0020	1.41	0.118	3.94	<3.0
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	11-Sep-14	D	<5.0	<0.50	<2.0	159	<0.50	1,970	0.230	331,000	<0.50	0.094	1.79	<10	<0.30	76	729,000	10.4	<2.0	0.89	<2.0	6,110,000	<0.050	<5.0	0.961	1.43	10.4
P14.5-12S	Porewater EAZ	P14.5-12	NA	CL	0.8-1.0	0.8	1.0	Beach sand	Weathered Colluvium	11-Sep-14	T	1,340	<0.50	<2.0	158	<0.50	2,050	0.311	323,000	1.12	1.05	7.6	1,940	6.40	76	718,000	107	<2.0	1.87	<2.0	6,000,000	<0.050	47.2	1.01	6.92	21.2
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Oct-11	D	<5.0	<0.50	4.8	210	<0.50	1,330	0.140	475,000	<0.50	1.31	<0.50	<10	<0.30	159	423,000	3,770	5.7	0.92	<2.0	4,400,000	<0.050	<5.0	2.18	<0.50	13.1
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Dec-11	D	5.5	<0.50	<2.0	125	<0.50	850	<0.050	364,000	<0.50	1.17	0.50	<10	<0.30	144	279,000	3,140	5.5	2.08 J+	<2.0	3,150,000	<0.050	<5.0	1.7	<0.50	25.1
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-12	D	<30	<0.10	0.65	86.4	<0.050	741	<0.050	219,000	<5.0	0.78	<5.0	<90	<0.50	111	157,000	1,850	5.90	<2.0	<2.0	2,230,000	<0.020	<2.0	1.39	<0.50	<30
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	7-Jun-12	D	<5.0	<0.50	<2.0	33.8	<0.50	540	<0.050	110,000	<0.50	0.187	<0.50	<10	<0.30	56	79,800	246	6.8	1.36	<2.0	1,400,000	<0.050	<5.0	0.738	<0.50	5.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	31.4	<0.50	3,620	<0.050	321,000	<0.50	1.81	0.61	203	<0.30	154	903,000	1,940	9.3	2.22	<2.0	7,690,000	0.062	<5.0	2.13	<0.50	8.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<7.0	138	<0.50	3,000	<0.050	406,000	<0.50	0.149	<0.50	198	<0.30	142	837,000	3,190	<2.0	0.52	<3.0	6,900,000	<0.050	<5.0	1.64	1.35	<3.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Nov-12	D	<5.0	<0.50	<7.0	158	<0.50	2,510	0.059	407,000	<0.50	0.160	<0.50	211	<0.30	160	746,000	3,400	<2.0	0.77	<2.0	6,430,000	<0.050	<5.0	2.28	0.87	<3.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<5.0	155	<0.50	2,290	<0.050	411,000	<0.50	0.782	<0.50	480	<0.30	123	671,000	3,350	<2.0	0.93	<2.0	5,470,000	<0.050	<5.0	2.53	<0.50	8.4
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	120 J	<0.50	1,690 J	<0.050	394,000	<0.50	1.03	<0.50	318 J	<0.30	106 J	555,000	2,020 J	<2.0	0.72 J	<2.0	5,030,000	<0.050	<5.0	1.76 J	<0.50	4.8
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	93.7	<0.50	1,330	<0.050	287,000	<0.50	0.778	<0.50	258	<0.30	107	325,000	1,790	<2.0	1.11	<2.0	3,460,000	<0.050	<5.0	1.49	<0.50	4.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	53.0	<0.50	1,170	<0.050	176,000	<0.50	0.805	0.62	134	<0.30	73	184,000	1,410	2.3	1.07	<2.0	2,020,000	<0.050	<5.0	1.28	<0.50	4.4
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	<2.0	35.6	<0.50	1,020	<0.050	106,000	<0.50	0.489	1.45	138	<0.30	52	106,000	490	3.1	1.60	<2.0	1,590,000	<0.050	<5.0	0.944	<0.50	3.8
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<3.0	24.5	<0.50	800	<0.050	81,800	<0.50	0.19	<0.50	28	<0.30	59	75,900	13.3	4.5	0.81	<2.0	1,530,000	<0.050	<5.0	1.53	<0.50	3.3
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	2.6	21.2	<0.50	670	<0.050	54,800	<0.50	0.135	<0.50	21 J	<0.30	41	52,000	6.88	4.8	0.54	<2.0	1,160,000	<0.050	<5.0	1.43	0.84	4.5
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	9-Jun-14	D	<2.0	0.153	3.21	18.8	<0.010	632	<0.010	37,100	<1.0	<0.10	1.00	<30	0.38	40.7	32,700	1.00	4.79	0.61	<0.40	911,000	0.0119	<0.40	1.29	0.68	4.0
P14.5-12I	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	8-Sep-14	D	1.5	0.116	3.43	23.1	<0.0050	579	<0.0050	25,100	<0.50	0.069	0.40	<30	0.076	31.5	24,400	1.44	4.71	0.76	<0.20	742,000	0.0116	<0.20	0.775	0.877	2.00
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	D	10.9	0.035	0.737	7.78	<0.0050	129	<0.0050	12,100	<0.50	<0.050	<0.50	<30	<0.050	0.73	3,780	2.71	1.65	<0.20	<0.20	29,000	0.0028	<0.20	0.0536	0.392	<3.0
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Jun-12	D	6.6	0.139	1.03	16.8	<0.0050	158	0.0286	25,500	<0.50	0.063	0.58	<30	0.061	2.79	21,500	122	2.36	1.18	<0.20	167,000	<0.0020	0.30	0.0937	0.533	21.8
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12	D	8.6 J	0.089 J	0.544 J	330	<0.0050	1,130	0.0220 J	307,000	<0.50	<0.050	0.70 J	<90	<0.050	36.8	293,000	9.42 J	3.53	0.58	<0.20	2,420,000	0.0200 J	0.23 J	0.500	0.265 J	3.5
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	140	<0.50	540	<0.050	157,000	<0.50	0.073	1.24	29	<0.30	<20	104,000	24.5	2.7	<0.50	<2.0	943,000	<0.050	<5.0	0.215	<0.50	<3.0
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	15-Mar-13	D	2.4 J	0.070	0.724	45.7	<0.0050	243	0.0854 J	72,200	<0.50	0.114 J	0.49 J	<30	<0.050	5.56	33,300	7.55	3.08	0.46 J	<0.20	322,000	<0.0020	<0.20	0.153	0.470	3.3 J
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	D	6.7	0.065	1.77	27.6	<0.0050	249	<0.0050	42,700	<0.50	0.093	0.49	<30	<0.050	5.62	47,200	132	1.80	0.69	<0.20	367,000	<0.0020	<0.20	0.100	0.655	2.3
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	D	2.8	0.065	0.91	89.6	<0.010	403	<0.010	80,800	<1.0	0.22	0.66	<30	<0.10	8.31	98,900	447	1.41	0.89	<0.40	842,000	<0.0040	<0.40	0.105	0.28	4.6
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	D	6.3	0.101	1.59	7.74	<0.0050	224	<0.0050	9,740	<0.50	0.053	0.24	<30	<0.050	2.01	9,110	8.56	1.47	<0.20	<0.20	128,000	<0.0020	<0.20	0.0445	0.614	1.5 J
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	D	15.2	0.276	2.06	6.87	<0.0050	152	<0.0050	6,220	<0.50	0.097	0.22	<30	<0.050	0.83	3,860	39.2	4.96	0.40	<0.20	57,700	<0.0020	1.37	0.0461	1.03	1.9
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	D	8.3	0.059	1.31	3.83	<0.0050	170	0.0135	6,570	<0.50	<0.050	0.89	<30	<0.050	0.73	3,060	6.14	1.27	0.27	<0.20	50,800	<0.0020	<0.20	0.0456	0.715	3.3
P14.5-12D	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	D	5.8	0.054	1.37	4.62	<0.0050	156	0.0178	7,730	<0.50	<0.050	0.65	<30	<0.050	0.92	4,340	5.59	1.21	0.37	<0.20	52,200	<0.0020	<0.20	0.0549	0.662	3.6
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-12	D	17.7	<0.50	<2.0	19.1	<0.50	2,060	<0.050	135,000	<0.50	<0.050	1.12	22	<0.30	63	402,000	1.55	5.9	1.23	<2.0	4,050,000	<0.050	<5.0	1.80	1.57	8.3
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	D	<5.0	0.79	<2.0	22.2	<0.50	2,130	0.158	181,000	<0.50	0.988	1.44	57	<0.30	74	544,000	31.4	7.0	8.25	<2.0	4,820,000	<0.050	<5.0	1.31	1.81	40.7
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	D	<5.0	<0.50	<2.0	37.7	<0.50	2,850	0.252	323,000	<0.50	0.081	1.33	<10	<0.30	124	910,000	3.18	6.8	1.57	<2.0	7,700,000	<0.050	<5.0	1.44	1.38	5.8
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	D	15.2	<0.50	2.8	31.8	<0.50	3,030	<0.050	152,000	<0.50	0.964	<0.50	14	<0.30	82	441,000	38.2	8.9	2.72	<2.0	4,430,000	<0.050	<5.0	1.64	1.97	6.9
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	D	<5.0	<0.50	<2.0	17.6	<0.50	2,350	<0.050	109,000	<0.50	0.130	0.72	21	<0.30	54	329,000	2.47	7.4	4.28	<2.0	3,130,000	<0.050	<5.0	1.52	1.84	4.2
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Jun-13	D	<5.0	<0.50	<2.0	25.6	<0.50	2,720	0.082	197,000	<0.50	0.117	1.48	<10	<0.30	94	514,000	1.22	5.6	1.39	<2.0	4,100,000	<0.050	<5.0	1.12	2.21	8.7
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Jun-13	T	8,470	<0.50	3.4	56.0	<0.50	2,620	0.081	182,000	9.75	4.49	11.6	10,200	3.15	91	483,000	177	5.9	5.06	<2.0	3,970,000	<0.050	329	1.54	34.2	19.4
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	<2.0	34.5	<0.50	2,910	0.122	294,000	<0.50	0.539	2.64	29	<0.30	107	829,000	14.5	7.0	2.41	<2.0	6,850,000	<0.050	<5.0	1.34	1.98	7.5
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Sep-13	T	14,200	<0.50	<5.0	95.0	<0.50	2,780	0.198	265,000	15.4	7.90	21.5	18,300	5.41	116	786,000	313	7.1	8.62	<2.0	6,330,000	0.056	530	2.01	56.7	42.7
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	<2.0	28.4	<0.50	2,630	<0.050	237,000	<0.50	1.55	<0.50	103	<0.30	84	742,000	40.4	8.2	1.28	<2.0	5,890,000	<0.050	<5.0	2.01	2.32	5.3
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	16-Dec-13	T	2,680	<0.50	<2.0	34.3	<0.50	2,490	0.072	250,000	2.56	2.10	3.06	3,320	1.07	82	733,000	69.7	7.5	1.60	<2.0	6,180,000	<0.050	110	2.07	11.5	8.7
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	14.0	<0.50	2,450	<0.050	137,000	<0.50	0.069	1.42	<10	<0.30	62	411,000	1.83	6.9	0.62	<2.0	4,110,000	<0.050	<5.0	1.71	1.50	8.5
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-14	T	3,870	<0.50	<2.0	27.2	<0.50	2,360	<0.050	116,000	3.40	1.85	5.11	4,320	1.37	57	350,000	71.8	6.6	1.58	<2.0	3,610,000	<0.050	156	1.72	15.7	9.8
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	D	<5.0	<0.50	<2.0	24.0	<0.50	2,890	<0.050	202,000	<0.50	0.094	1.43	<10	<0.30	108	546,000	3.36	6.3	0.69	<2.0	4,880,000	<0.050	<5.0	1.57	1.88	10.1
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	T	6,680	<0.50	4.2	49.3	<0.50	2,840	<0.050	200,000	7.89	3.87	9.88	8,820	3.02	115	539,000	159	5.8	3.35	<2.0	4,810,000	<0.050	243	1.95	29.6	17.9
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	D	<5.0	<0.50	2.8	44.0	<0.50	3,050	<0.050	321,000	<0.50	6.83	4.09	540	<0.30	135	901,000	394	5.2	2.06	<2.0	7,380,000	<0.050	<5.0	1.16	2.12	3.8
P15-12S	Porewater EAZ	P15-12	NA	CL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Sep-14	T	95.2	<0.50	3.2	46.3	<0.50	3,010	<0.050	334,000	<0.50	8.04	5.9	745	<0.30	135	937,000	472	5.7	2.34	<2.0	7,570,000	<0.050	<5.0	1.19	2.30	5.4
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Mar-12	D	<3.0	0.034	0.343	13.8	<0.0050	164	<0.0050	5,030	<0.50	<0.050	<0.50	<30	<0.050	1.71	7,620	65.8	0.554	<0.20	<0.20	119,000	0.0022	<0.20	0.0566	0.083	66.4
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Jun-12	D	3.5	0.033	0.537	20.0	<0.0050	197	0.0165	7,160	<0.50	0.107	8.85	<30	0.277	1.94	9,690	93.2	0.611	0.39	<0.20	150,000	<0.0020	<0.20	0.0804	0.189	9.7
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Sep-12	D	6.0	0.024	0.576	18.7	<0.0050	203	<0.0050	6,260	<0.50	0.063	0.39	<30	<0.050	1.95	9,210	77.5	0.547	0.24	<0.20	148,000	0.0039	0.25	0.0700	0.118	3.8
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-12	D	3.1	0.026	0.854	18.4	<0.0050	262	<0.0050	8,530	<0.50	0.061	0.21	<30	<0.050	2.36	11,900	74.4	0.575	0.31	<0.20	142,000	<0.0020	<0.20	0.0800	0.199	3.8
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	11-Mar-13	D	1.7	0.018	0.587	17.2	<0.0050	163	<0.0050	8,400	<0.50	0.050	0.52	<30	<0.050	2.09	11,900	35.0	0.464	0.24	<0.20	135,000	<0.0020	<0.20	0.0694	0.246	5.6
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13	D	1.7 J	0.015	0.990	21.6	<0.0050	223	<0.0050	9,830	<0.50	0.097 J	<0.20	65	<0.050	1.67	15,000	123	0.492	<0.20 UJ	<0.20	175,000	<0.0020	<0.20	0.0749	0.152	<1.0 UJ
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	D	2.8	0.066	1.62	12.3	<0.0050	221	<0.0050	9,280	<0.50	0.208	0.37	108	<0.050	2.79	12,900	108	0.694	0.47	<0.20	176,000	<0.0020	<0.20	0.118	0.490	4.6
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	16-Dec-13	D	1.5	0.128	0.927	14.8	<0.0050	182	0.0143	12,300	<0.50	0.115	0.38	<30	<0.050	3.19	15,600	45.0	0.468	0.34	<0.20	143,000	<0.0020	<0.20	0.113	0.678	4.9
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	D	<1.0	0.048	0.631	15.9	<0.0050	161	0.0161	10,900	<0.50	0.074	0.29	<30	<0.050	2.13	14,900	16.0	0.387	0.27	<0.20	133,000	<0.0020	<0.20	0.0824	0.538	4.6
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	D	2.0	0.050	0.598	15.5	<0.0050	153	0.0338	10,200	<0.50	0.109	0.89	<30	<0.050	2.39	14,500	81.7	0.384	0.43	<0.20	130,000	<0.0020	<0.20	0.0912	0.595	3.9
P15-12I	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	D	1.2	0.080	0.740	24.0	<0.0050	196	0.0084	11,400	<0.50	0.106	0.44	<30	<0.050	2.61	15,700	113	0.402	0.46	<0.20	140,000	<0.0020	<0.20	0.0911	0.498	2.4
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-12	D	10.7	0.097	1.72	16.6	<0.0050	158	<0.0050	11,100	<0.50	0.091	<0.50	<30	<0.050	10.0	14,000	99.0	1.63	0.37	<0.20	148,000	0.0072	<0.20	0.431	0.404	5.4
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	D	4.7	0.094	1.50	14.8	<0.0050	116	0.0126	9,810	0.58	<0.050	0.83	<30	<0.050	7.80	7,970	10.6	2.44	0.50	<0.20	85,500	<0.0020	<0.20	0.386	0.707	3.0
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	D	2.9	0.052	1.78	21.1	<0.0050	144	<0.0050	12,300	<0.50	0.063	0.28	<30	<0.050	9.18	10,900	71.2	1.74	0.33	<0.20	116,000	<0.0020	<0.20	0.378	0.396	2.3
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	2.7	102	<0.50	1,800	<0.050	88,300	<0.50	0.624	<0.50	15	<0.30	91	176,000	436	6.8	1.03	<2.0	2,220,000	<0.050	<5.0	1.52	<0.50	<3.0
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	D	<2.0	0.137	3.54	25.2	<0.010	558	<0.010	18,200	<1.0	<0.10	<0.40	<30	<0.10	30.9	29,800	36.8	3.91	0.56	<0.40	720,000	0.0046	<0.40	0.887	1.40	<2.0
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	D	4.2 J	0.123	4.61	10.2	<0.0050	544	<0.0050	6,310	<0.50	0.085 J	0.44 J	<30	<0.050	14.7	9,400	23.0	2.86	0.57 J	<0.20	429,000	<0.0020	<0.20	0.485	1.41	2.8 J
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	2.2	92.8	<0.50	2,460	0.075	165,000	<0.50	1.31	2.14	29	<0.30	91	464,000	373	8.3	2.48	<2.0	4,470,000	<0.050	<5.0	1.87	1.37	4.1
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	2.5	29.4	<0.50	750	<0.050	27,600	<0.50	0.074 J	<0.50	<10	<0.30	31	53,200	20.7	3.5	<0.50	<2.0	1,130,000	<0.050	<5.0	0.965	1.95	<3.0
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-14	D	<5.0 UJ	<0.50 UJ	3.9	9.3	<0.50 UJ	580	<0.050 UJ	9,850	<0.50 UJ	0.093	<0.50 UJ	<10 UJ	<0.30 UJ	<20	17,500	3.48	2.7	<0.50 UJ	<2.0 UJ	594,000	<0.050 UJ	<5.0 UJ	0.720	2.07	<3.0 UJ
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	D	3.7	0.309	6.25	4.16	<0.0050	617	<0.0050	4,010	<0.50	<0.050	0.91	<30	0.054	12.8	7,040	0.37	2.29	0.39	<0.20	370,000	<0.0020	<0.20	0.557	2.95	3.1
P15-12D	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Sep-14	D	11.1	0.251	8.60	2.45	<0.0050	373	<0.0050	1,720	<0.50	<0.050	0.57	<30	<0.050	7.13	2,570	7.10	1.36	0.37	<0.20	215,000	<0.0020	0.34	0.430	3.73	1.4
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-13	D	5.6	<0.50	<2.0	309	<0.50	420	0.396	229,000	<0.50	9.43	1.32	65	<0.30	<20	160,000	1,720	7.7	16.7	<2.0	1,020,000	<0.050	<5.0	5.13	<0.50	8.1
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	D	<5.0	<0.50	<2.0	204	<0.50	780	0.050	156,000	<0.50	11.2	<0.50	1,060	<0.30	27	239,000	2,480	5.5	7.43	<2.0	1,690,000	<0.050	<5.0	3.26	<0.50	5.2
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Jun-13	T	9,510	<0.50	<2.0	272	<0.50	740	0.380	141,000	10.5	11.6	17.1	12,900	4.95	26	172,000	1,920	5.6	16.2	<2.0	1,450,000	0.098	307	3.46	40.1	47.1
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	<2.0	234	<0.50	1,580	0.552	373,000	<0.50	14.6	2.16	130	<0.30	45	727,000	1,720	2.9	11.6	<2.0	4,710,000	0.057	<5.0	2.21	<0.50	15.2
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Sep-13	T	27,200	<0.50	4.3	397	0.85	1,710	0.889	401,000	30.9	34.4	55.9	41,600	14.9	64	774,000	2,340	3.6	26.7	<2.0	5,050,000	0.307	618	3.76	124	108
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	98.1	<0.50	1,220	0.372	216,000	<0.50	1.85	0.99	<10	<0.30	27	422,000	105	<2.0	4.59	<2.0	3,140,000	0.062	<5.0	1.35	<0.50	5.5
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	T	25,000	<0.50	4.0	257	0.79	1,270	0.770	221,000	29.0	24.4	45.8	37,600	15.2	46	423,000	777	<2.0	20.0	<2.0	3,140,000	0.262	599	2.66	113	105
P17.5-3S-A ^	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	T	68,200	<0.50	14.4	467	2.45	1,130	0.900	232,000	84.0	64.6	133	113,000	48.7	77	468,000	1,690	2.2	51.9	2.2	3,120,000	0.794	849	5.18	320	316
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	D	6.1	<0.50	<2.0	78.0	<0.50	1,000	0.699	191,000	<0.50	1.43	1.11	13	<0.30	25	367,000	327	<2.0	4.33	<2.0	2,490,000	0.060	<5.0	1.27	0.58	7.1
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	12-Mar-14	T	80,200	<0.50	12.6	538	2.92	910	1.26	186,000	96	87.0	154	132,000	59.5	88	377,000	2,390	2.6	62.0	<2.0	2,210,000	0.908	960	5.84	378	368
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	D	<5.0	<0.50	<2.0	73.6	<0.50	1,180	0.089	102,000	<0.50	0.508	1.98	<10	<0.30	33	180,000	50.3	2.1	2.66	<2.0	1,840,000	<0.050	<5.0	0.617	<0.50	10.7
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	T	1,910	<0.50	<2.0	78.1	<0.50	1,120	0.086	99,800	2.05	2.38	4.65	2,790	1.18	32	175,000	111	<2.0	3.72	<2.0	1,770,000	<0.050	50.5	0.654	8.19	13.0
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	D	7.0	<0.50	<2.0	72.9	<0.50	1,100	0.178	97,900	<0.50	0.856	1.38	<10	<0.30	41	196,000	145	2.0	3.06	<2.0	1,830,000	<0.050	<5.0	0.371	<0.50	7.9
P17.5-3S	Porewater EAZ	P17.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	T	528	<0.50	<2.0	62.8	<0.50	1,100	0.103	77,700	0.54	0.658	1.76	677	<0.30	40.0	154,000	49.0	2.3	2.12	<2.0	1,670,000	<0.050	19.3	0.329	2.21	9.1
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Mar-13	D	4.4	0.618	1.35	43.6	<0.0050	116	<0.010	36,900	<0.50	0.608	1.30	<30	<0.050	7.55	11,700	177	21.0	3.38	2.32	180,000	0.0140	<0.20	4.03	1.07	8.8
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	14-Jun-13	D	<5.0	<0.50	2.8	357	<0.50	490	<0.050	281,000	<0.50	8.24	<0.50	4,410	<0.30	22	301,000	9,210	7.1	5.06	<2.0	1,460,000	<0.050	<5.0	5.54	<0.50	3.0
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	18-Sep-13	D	<5.0	<0.50	2.3	457	<0.50	1,440	0.097	404,000	<0.50	7.56	2.33	4,770	<0.30	35	656,000	5,730	6.3	4.99	<2.0	4,160,000	<0.050	<5.0	5.71	<0.50	5.8
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	176	<0.50	1,140	<0.050	362,000	<0.50	5.85	<0.50	2,870	<0.30	28	601,000	3,540	4.4	2.23	<2.0	3,440,000	<0.050	<5.0	3.92	<0.50	<3.0
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	12-Mar-14	D	<5.0	<0.50	<2.0	170	<0.50	1,020	<0.050	339,000	<0.50	5.55	<0.50	2,880	<0.30	21	504,000	2,920	4.2	2.79	<2.0	2,910,000	<0.050	<5.0	4.60	<0.50	4.8
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	9-Jun-14	D	<5.0	<0.50	<2.0	127	<0.50	740	<0.050	332,000	<0.50	7.89	0.52	2,630	<0.30	<20	356,000	3,820	3.5	4.80	<2.0	2,200,000	<0.050	<5.0	4.99	<0.50	5.3
P17.5-3I	Porewater	P17.5-3	NA	FS	2.6-3.0	2.6	3.0	Weathered Colluvium	---	8-Sep-14	D	<5.0	<0.50	2.0	125	<0.50	1,190	<0.050	248,000	<0.50	3.07	<0.50	2,310	<0.30	25	358,000	2,310	3.1	2.18	<2.0	2,410,000	<0.050	<5.0	3.23	<0.50	3.9
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Mar-13	D	3.0	1.08	4.86	99.8	<0.0050	85.1	<0.025	69,900	<0.50	0.576	0.81	<30	<0.050	12.5	13,900	212	54.4	2.30	5.07	199,000	0.0115	<0.20	11.3	1.14	4.3
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Jun-13	D	2.7	0.233	3.59	58.4	<0.0050	61.9	<0.0050	149,000	<0.50	0.696	0.37	<30	<0.050	4.34	34,700	425	1.74	0.83	<0.20	78,600	0.0059	<0.20	2.73	0.093	2.1
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	D	2.6	0.169	2.59	60.1	<0.010	230	0.013	157,000	<1.0	0.73	0.78	82	<0.10	8.31	95,200	455	1.82	1.16	<0.40	553,000	0.0079	<0.40	2.60	<0.10	3.3
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	D	1.9	0.161	2.85	53.4	<0.0050	67.9	<0.0050	177,000	<0.50	0.533	0.34	<30	<0.050	2.29	38,900	429	0.531	0.89	<0.20	56,900	0.0061	<0.20	1.28	0.059	4.5
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	2.5	0.068	2.65	55.8	<0.0050	62.3	<0.0050	185,000	<0.50	0.303	<0.20	104	<0.050	1.24	40,500	441	0.311	0.43 J	<0.20	34,900	0.0028 J	<0.20	0.757	0.072	3.7 J
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	D	2.7	0.030	2.18	59.7	<0.0050	52.1	<0.0050	175,000	<0.50	0.330	0.54	135	<0.050	1.46	38,800	438	0.280	0.60	<0.20	34,800	<0.0020	<0.20	0.935	0.055	2.6
P17.5-3D	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	D	1.8	0.051	2.17	67.6	<0.0050	63.1	<0.0050	185,000	<0.50	0.271	0.64	34	<0.050	2.73	36,900	486	0.196	0.57	<0.20	33,700	0.0041	<0.20	0.825	0.081	3.5
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-13	D	2.9	0.257	0.503	23.1	0.0105	61.4	<0.015	51,300	<0.50	3.23	0.55	998	<0.050	3.87	24,400	1,300	7.42	10.2	0.22	72,800	0.0046	<0.20	0.404	0.147	23.3

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13	D	2.8	0.376 J	6.57 J	16.8	0.0063	61.9 J	<0.0050	48,900	<0.50	1.46	<0.20	7,360	<0.050	3.74 J	20,400	1,480 J	13.2 J	3.05	<0.20	41,800 J	<0.0020	<0.20	0.779 J	0.366	8.6 J
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Jun-13	D	2.1	0.077	1.58	33.1	0.0052	37.1	<0.0060	55,700	<0.50	1.34	0.61	1,910	<0.050	2.59	19,800	1,280	3.56	3.77	<0.20	25,000	0.0025	<0.20	0.200	0.107	130
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Jun-13	T	8,420	0.236	4.63	95.1	0.262	48.9	0.263	57,200	10.1	4.73	14.7	23,600	3.10	7.68	22,800	1,730	5.88	15.9	<0.20	26,100	0.0393	261	0.704	23.4	1,140
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	18-Sep-13	D	<1.0	0.052	1.53	32.9	<0.0050	45.6	<0.0050	56,500	<0.50	0.479	0.55	7,010	<0.050	3.67	20,900	1,750	4.30	2.17	<0.20	31,700	<0.0020	<0.20	0.231	0.198	511
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	19-Sep-13	T	450	<0.080 U	1.67	37.7	0.0166	46.7	<0.0050	57,300	0.76	0.572	0.76	7,660	0.176	3.23	20,200	1,560	4.05	1.22	<0.20	29,400	0.0033	17.8	0.246	1.32	372
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	13-Dec-13	D	<1.0	0.078	0.493	32.7	<0.0050	23.9	0.0097	58,000	<0.50	0.956	0.43	2,250	<0.050	1.79	19,300	790	1.40	2.24	<0.20	23,900	<0.0020	<0.20	0.0677	<0.050	660
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	13-Dec-13	T	5,310	0.368	7.81	90.4	0.137	37.6	0.0635	56,800	7.11	3.04	8.46	50,800	1.81	4.54	20,500	806	4.03	5.44	<0.20	24,600	0.0213	201	0.383	16.9	1,500
P18-4.5S-A ^	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	13-Dec-13	T	602	<0.080	1.77	42.6	0.0186	34.2	<0.0050	57,300	0.95	1.82	1.03	4,540	0.194	2.09 J+	19,400	672	1.44	2.79	<0.20	23,200	0.0038	22.7	0.0885	1.70	459
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-14	D	<1.0	0.029	0.598	38.4	<0.0050	22.2	<0.0050	57,300	<0.50	0.693	0.50	4,510	<0.050	1.46	19,300	499	1.52	1.69	<0.20	22,900	<0.0020	<0.20	0.0653	<0.050	649
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	12-Mar-14	T	2,660	0.161	5.19	79.6	0.113	31.5	0.119	55,900	3.84	1.82	4.87	36,600	1.21	3.03	19,500	480	3.07	3.72	<0.20	22,500	---	106	0.325	8.92	1,150
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Jun-14	D	<1.0	0.035	0.265	50.8	<0.0050	30.5	<0.0050	57,600	<0.50	0.985	0.98	384	0.094	1.78	20,200	452	1.60	3.43	<0.20	31,400	<0.0020	<0.20	0.0662	<0.050	864
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Jun-14	T	225	0.080 J+	3.10	62.6	0.0265	32.2	0.0333	52,000	0.64	1.14	1.02	17,100	0.255	1.88	18,800	440	2.42	3.27	<0.20	26,700	0.0028	8.36	0.143	1.78	742
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	8-Sep-14	D	1.5	0.049	0.355	48.4	<0.0050	53.8	<0.0050	57,500	<0.50	0.631	0.82	870	0.061	3.70	22,700	737	1.88	2.97	<0.20	62,000	0.0063	<0.20	0.0919	0.052	875
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	8-Sep-14	T	645	0.129	7.08	80.5	0.0491	59.9	0.0602	56,400	1.12	0.914	1.58	42,100	0.392	4.12	22,500	688	4.98	3.60	<0.20	60,500	<0.0060	24.6	0.271	3.44	1,120
P18-4.5S-A	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	1-Dec-14	D	<1.0	0.027	0.277	37.1	<0.0050	51.5	0.0080	51,700	<0.50	0.579	0.66	345	<0.050	2.10	21,300	408	0.878	2.60	<0.20	48,700	<0.0020	<0.20	0.0287	<0.050	808
P18-4.5S-A	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	1-Dec-14	T	371	0.097 J+	5.32	53.6	0.0348 J+	61.7	0.0440	54,600	1.22	0.833	1.27	26,200	0.257	3.04	20,300	435	2.97	3.54	<0.20	51,900	0.0033	16.3	0.134	2.22	1,150
P18-4.5S-B	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	4-Dec-14	D	1.1	0.076	0.480	41.9	<0.0050	36.8	0.0084	51,300	<0.50	0.775	0.74	620	<0.050	1.14	19,500	410	1.07	5.40	<0.20	30,100	<0.0020	<0.20	0.0581	<0.050	496
P18-4.5S-B	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	4-Dec-14	T	871	0.333	0.903	51.8	0.0275	38.2	0.0246	49,100	1.16	1.03	1.56	2,450	0.419	1.86	18,800	412	1.27	6.75	<0.20	29,100	0.0049	34.5	0.0966	2.38	424
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Mar-15	D	<1.0	0.072	0.159	52.5	<0.0050	39.8	0.0206	54,800	<0.50	0.611	0.84	<30	<0.050	1.15	20,500	332	0.819	1.99	<0.20	43,700	<0.0020	<0.20	0.0449	<0.050	902
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Mar-15	T	845	0.307	3.47	70.0	0.0371	44	0.0411	53,400	1.57	0.933	2.04	14,200	0.479	1.49	20,400	322	1.75	2.54	<0.20	42,400	0.0067	36.1	0.121	3.06	834
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	17-Jun-15	D	<1.0	0.038	0.140	55.3	<0.0050	45.3	0.0443	53,400	<0.50	0.535	0.69	<30	0.114	1.51	21,100	299	0.925	1.85	<0.20	61,000	<0.0020	<0.20	0.0414	<0.050	797
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	17-Jun-15	T	92.9	0.044	1.61	59.6	0.0075	50.0	0.0372	52,500	<0.50	0.559	<0.50	4,540	0.151	1.46	21,100	295	1.23	1.74	<0.20	60,100	<0.0050	3.38	0.0610	0.463	917
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Sep-15	D	<1.0	0.108	0.139	78.0	<0.0050	74.4	0.135	83,300	<0.50	1.56	0.43	<30	<0.050	3.81	38,400	486	1.57	9.01	<0.20	126,000	0.0114	<0.20	0.0841	<0.050	2,130
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	11-Sep-15	T	338	0.536	1.84	81.9	0.0262	74	0.146	77,700	0.73	1.71	1.29	5,120	0.310	3.93	37,000	468	2.20	8.74	<0.20	119,000	0.0124	15.2	0.158	1.41	1,880
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Dec-15	D	<1.0	0.036	0.181	253	<0.0050	75.1	0.357	274,000	<0.50	1.74	0.41	269	<0.050	2.45	85,900	1,640	0.279	7.18	<0.20	77,900	0.0036	<0.20	0.0306	<0.050	2,750
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	9-Dec-15	T	135	0.194	2.30	268	0.0217	74	0.446	259,000	0.57	1.83	0.70	17,600	0.087	3.07	84,700	1,670	1.42	7.09	0.39	75,200	<0.0050	5.31	0.113	0.620	2,840
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	3-Mar-16	D	<1.0	0.057	0.111	101	<0.0050	44.5	0.105	112,000	<0.50	1.40	0.81	<30	<0.050	2.50	43,500	638	0.545	3.78	<0.20	82,900	0.0042	<0.20	0.0548	<0.050	3,190
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	3-Mar-16	T	66.0	0.146	0.773	105	0.0058	44	0.108	110,000	<0.50	1.42	0.61	3,530	0.122	2.57	44,400	643	0.791	3.79	<0.20	85,300	<0.0050	2.49	0.0731	0.280	3,100
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	20-May-16	D	1.1	0.337	0.167	72.0	<0.0050	27.6	0.0696	71,900	<0.50	1.24	0.89	36	0.113	1.76	24,300	386	1.02	4.94	<0.20	47,100	0.0033	<0.20	0.0616	<0.050	2,110
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	20-May-16	T	844	0.736	2.77	82.7	0.0318	28	0.188	71,100	1.23	1.58	2.32	11,800	0.510	2.11	24,500	369	1.95	5.26	<0.20	46,700	0.0105	34.4	0.141	2.83	2,800
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	22-Aug-16	D	<1.0	0.038	0.242	59.1	<0.0050	38.9	0.0211	53,300	<0.50	0.768	0.38	334	<0.050	2.23	20,500	344	1.93	2.02	<0.20	56,600	<0.0020	<0.20	0.0493	<0.050	2,330
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	22-Aug-16	T	1,400	0.220	3.44	70.5	0.0593	37	0.190	53,000	2.35	3.97	3.57	15,100	1.16	2.92	20,800	332	3.19	6.30	<0.20	56,300	0.0130	53.1	0.254	5.86	9,300
P18-4.5S	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	22-Nov-16	D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2,800
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-13	D	1.1	0.337	0.325	76.5	<0.0050	140	<0.010	94,000	<0.50	5.22	0.54	<30	0.090	4.75	42,100	1,660	8.31	3.90	<0.20	137,000	<0.0020	<0.20	0.662	0.397	32.5
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	14-Jun-13	D	<1.0	0.045	0.290	95.5	<0.0050	38.9	0.0632	105,000	<0.50	0.864	0.85	<30	<0.050	0.90	31,200	568	0.731	1.17	<0.20	25,800	<0.0020	<0.20	1.10	0.814	12.3
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	18-Sep-13	D	<1.0	0.028	0.273	89.5	<0.0050	43.3	0.0458	97,400	<0.50	0.895	0.74	<30	<0.050	1.15	29,100	570	0.987	1.21	<0.20	27,500	<0.0020	<0.20	0.982	0.937	22.1
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	13-Dec-13	D	<1.0	0.147	0.230	83.0	<0.0050	40.0	0.0324	103,000	<0.50	0.693	0.55	<30	<0.050	0.98	26,600	492	0.743	1.00	<0.20	24,700	<0.0020	<0.20	0.913	0.866	82.6
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	12-Mar-14	D	<1.0	0.027	0.209	88.1	<0.0050	35.7	0.0453	110,000	<0.50	0.65	0.55	<30	<0.050	0.86	29,700	483	0.577	0.88	<0.20	24,300	<0.0020	<0.20	1.01	0.683	18.8
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	9-Jun-14	D	1.2	0.032	0.185	78.3	<0.0050	38.7	0.0253	104,000	<0.50	0.807	1.16	34	<0.050	1.41	29,900	577	1.63	1.22	<0.20	23,400	<0.0020	<0.20	1.04	0.589	23.3
P18-4.5I	Porewater	P18-4.5	NA	FS	2.2-2.6	2.2	2.6	Weathered Colluvium	---	8-Sep-14	D	<1.0	0.033	0.287	84.7	<0.0050	46.3	<0.0050	112,000	<0.50	1.04	0.41	85	<0.050	1.59	31,600	779	1.68	1.10	<0.20	24,900	<0.0020	<0.20	1.21	0.638	8.3
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	D	1.6 J	0.034	0.229	60.7	<0.0050	38.0	0.153	99,800	<0.50	3.51	0.25 J	<30	<0.050	0.85	21,800	3,680	0.344	2.39	<0.20	20,900	0.0163	<0.20	1.20	0.471	7.3
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	D	<1.0	0.023	0.200	42.1	<0.0050	34.8	0.113	85,200	<0.50	2.60	0.53 J	<30	<0.050	0.57	18,500	3,360	0.273	1.55	<0.20	21,900	0.0025	<0.20	0.769	0.672	2.2
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	D	<1.0	0.022	0.196	43.9	<0.0050	41.6	0.0864	76,500	<0.50	2.49	0.36 J	<30	<0.050	0.70	17,000	3,680	0.214	1.27 J	<0.20	21,400	0.0030	<0.20	0.598	0.619	2.0 J
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	D	<1.0	0.047	0.197	44.6	<0.0050	41.9	0.0980	83,500	<0.50	2.62	0.49	<30	<0.050	0.69	19,200	3,440	0.197	1.42	<0.20	20,700	0.0024	<0.20	0.713	0.581	4.0
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	<1.0	0.019	0.179	48.6	<0.0050	39.5	0.105	93,100	<0.50	2.72	0.84	<30	<0.050	0.76	19,800	3,480	0.234	1.38	<0.20	20,600	0.0021	<0.20	0.812	0.543	3.5
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	D	<1.0	0.018	0.174	46.3	<0.0050	37.5	0.0907	90,700	<0.50	2.77	0.85	<30	<0.050	0.93	20,300	3,550	0.213	1.45	<0.20	20,600	0.0028	<0.20	0.898	0.557	5.1
P18-4.5D	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	8-Sep-14	D	<1.0	0.023	0.205	48.9	<0.0050	41.7	0.0965	79,900	<0.50	2.54	0.50	<30	<0.050	0.81	17,600	4,040	0.172	1.43	<0.20	20,100	0.0031	<0.20	0.535	0.514	4.7
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	14-Mar-13	D	2.4	0.346	0.434	42.0	<0.0050	87.7	0.0315	50,500	<0.50	1.37	0.66	<30	<0.050	5.23	13,400	987	4.53	3.14	1.04	77,900	0.0121	<0.20	2.05	0.347	4.6
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Jun-13	D	<1.0	0.124	0.439	51.6	<0.0050	51.8	0.0621	62,500	<0.50	0.875	0.33	<30	<0.050	1.41	15,600	4,490	2.00	5.16	<0.20	27,400	0.0111	<0.20	0.555	0.446	7.8
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	18-Jun-13	T	257	0.141	0.441	58.8	0.0154	63.4	0.0682	61,300	<0.50	1.40	1.22	352	0.210	1.62	15,500	4,380	2.26	5.16	<0.20	28,600	0.0135	8.23	0.574	1.33	5.6
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	19-Sep-13	D	2.6	0.092	0.503	50.0	<0.0050	57.5	<0.020	58,400	<0.50	0.942	0.88	63	<0.050	1.39	14,400	2,730	4.55	30.5	<0.20	40,200	0.0110	<0.20	0.711	0.171	10.1
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	19-Sep-13	T	637	<0.13 U	0.526	63.2	0.0177	64.6	0.0401	59,300	0.63	1.46	1.29	657	0.194	1.71	14,900	2,890	4.51	12.5	<0.20	41,200	0.0155	25.9	0.793	2.11	7.4
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	D	1.3	0.307	0.261	47.2	<0.0050	46.3	0.0382	70,600	<0.50	1.61	0.82	33	0.074	1.53	16,700	1,870	2.62	16.6	<0.20	49,600	0.0082	<0.20	0.661	0.090	10.6
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Dec-13	T	10,400	0.609	3.88	237	0.299	59.4	0.177	71,300	9.37	8.08	19.6	15,600	3.78	5.48	20,100	2,230	2.66	18.4	<0.20	49,700	0.0709	334	1.04	40.4	47.9
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-14	D	<1.0	0.027	0.233	52.3	<0.0050	37.0	0.0139	62,300	<0.50	1.09	0.44	53	<0.050	1.25	14,500	1,160	1.55	1.50	<0.20	39,700	0.0066	<0.20	0.539	0.118	6.3
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	13-Mar-14	T	2,560	0.129	0.671	104	0.0830	41.6	0.0560	58,900	2.16	2.58	4.61	4,270	1.02	2.35	15,400	1,080	1.43	3.01	<0.20	42,500	0.0226	95.2	0.626	8.91	14.3
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	D	1.5	0.036	0.682	60.8	<0.0050	50.3	<0.0050	62,900	<0.50	0.885	0.96	188	0.072	1.89	14,800	1,220	2.03	1.23	<0.20	44,700	0.0076	<0.20	0.669	0.237	9.5
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	9-Jun-14	T	14,500	0.454	3.72	373	0.513	54.8	0.412	68,500	15.1	15.2	35.6	24,700	8.03	8.98	20,600	1,910	1.72	17.0	<0.20	40,500	0.116	420	1.32	61	80.1
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	D	1.4	0.062	0.534	66.8	<0.0050	56.3	0.0763	62,500	<0.50	0.638	0.63	180	<0.050	1.79	14,500	1,200	1.99	4.46	<0.20	45,700	0.0035	<0.20	0.741	0.426	4.7
P18.5-3S	Porewater EAZ	P18.5-3	NA	FS	0.6-1.0	0.6	1.0	Weathered Colluvium	---	8-Sep-14	T	833	0.101	0.477	73.3	0.0294	67.3	0.0213	60,200	0.67	1.17	1.80	1,260	0.344	2.32	14,600	1,060	1.95	6.93	<0.20	46,200	<0.012	31.8	0.732	2.87	6.3
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	14-Mar-13	D	1.6	0.169	0.227	43.9	<0.0050	48.6	0.0928	60,000	<0.50	2.53	0.59	<30	<0.050	1.52	15,300	3,720	1.52	3.57	0.26	21,900	0.0122	<0.20	0.736	0.216	6.1
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	18-Jun-13	D	1.7	0.086	0.350	44.9	<0.0050	52.9	0.0150	58,100	<0.50	2.18	0.24	<30	<0.050	0.69	15,700	5,270	1.19	3.22	<0.20	20,600	0.0122	<0.20	0.423	0.208	9.5
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	19-Sep-13	D	4.0	0.060	0.405	45.5	0.0058	56.1	<0.0050	53,400	<0.50	1.53	0.42	72	<0.050	0.95	14,000	4,400	2.78	2.52	<0.20	26,900	0.0130	<0.20	0.531	0.118	5.6
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	13-Dec-13	D	<1.0	0.226	0.189	33.8	<0.0050	54.6	0.0295	57,400	<0.50	1.000	0.33	<30	<0.050	0.57	15,000	4,800	0.608	1.95	<0.20	21,800	0.0101	<0.20	0.238	0.125	7.6
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	13-Mar-14	D	<1.0	0.036	0.197	37.7	<0.0050	50.1	0.0471	56,500	<0.50	1.08	0.48	<30	<0.050	0.48	14,900	5,170	0.604	1.93	<0.20	20,400	0.0096	<0.20	0.240	0.145	4.4
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	9-Jun-14	D	1.2	0.027	0.202	38.3	<0.0050	50.6	0.0274	53,500	<0.50	1.01	0.80	<30	<0.050	0.68	15,100	5,150	0.624	2.21	<0.20	20,900	0.0114	<0.20	0.246	0.152	6.0
P18.5-3I	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	8-Sep-14	D	<1.0	0.028	0.239	57.4	<0.0050	66.1	0.0144	54,400	<0.50	1.45	0.42	<30	<0.050	0.79	14,700	6,920	0.790	2.21	<0.20	21,500	0.0115	<0.20	0.294	0.150	2.9
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-13	D	1.5	0.114	1.81	64.0	<0.0050	58.2	<0.0050	59,900	<0.50	3.22	0.36	887	<0.050	1.25	13,800	1,090	1.68	2.55	<0.20	22,200	0.0083	<0.20	0.450	0.155	6.6
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	D	<1.0	0.028	1.83	46.0	<0.0050	53.9	0.0094	56,800	<0.50	1.67	<0.20	1,610	<0.050	0.35	14,300	837	0.271	1.33	<0.20	21,000	0.0036	<0.20	0.0680	<0.050	5.9
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	D	1.1 J	0.018	2.27	43.4	<0.0050	55	0.0154 J	51,800	<0.50	0.977	0.35 J	2,080	<0.050	0.41	12,800	749	0.203	1.20	<0.20	17,700	0.0083	<0.20	0.0439	<0.050	4.1 J
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	D	<1.0 UJ	0.069	2.33	37.3	<0.0050	63.1	0.0076 J	58,400	<0.50	0.433	<0.20 UJ	2,460	<0.050	0.39	13,600	731	0.138	0.5 J	<0.20	19,600	0.0045	<0.20	0.0214	<0.050	1.8 J
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5	Colluvium	---	13-Mar-14	D	<1.0	<0.010	1.99	37.4	<0.0050	60.2	<0.0050	57,500	<0.50	0.526	<0.20	1,990	<0.050	0.36	14,100	700.00	0.17	0.62	<0.20	20,200	0.0036	<0.20	0.0252	<0.050	4.0
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5	Colluvium	---	9-Jun-14	D	<1.0	<0.010	2.11	36.1	<0.0050	55.0	<0.0050	55,600	<0.50	0.490	0.32	2,430	<0.050	0.46 J	14,000	729	0.163	0.53	<0.20	19,300	0.0044 J	<0.20	0.0213	<0.050	2.4
P18.5-3D	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5	Colluvium	---	8-Sep-14	D	<1.0	0.015	0.560	36.3	<0.0050	62.0	0.0064	56,100	<0.50	0.157	0.47	320	<0.050	0.43	14,400	544	0.136	0.60	<0.20	20,500	<0.0020	<0.20	0.0214	<0.050	3.1
Reference Area																																				
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	7-Oct-11	D	<5.0	<0.50	<2.0	67.3	<0.50	260	0.066	175,000	<0.50	0.125	0.66	<10	<0.30	23	97,500	198	5.1	2.83	<3.0	542,000	<0.050	<5.0	0.675	0.94	9.5
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Dec-11	D	46.4	<0.50	<2.0	94.3	<0.50	340	0.075	157,000	<0.50	0.759	0.58	49	<0.30	26	89,500	999	5.0	2.40	<2.0	764,000	<0.050	<5.0	0.893	2.45	<3.0
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	5-Jan-12	D	<5.0	<0.50	<2.0	88.8	<0.50	360	0.069	186,000	<0.50	0.524	<0.50	<10	<0.30	23	98,400	450	3.7	2.39	<2.0	650,000	<0.050	<5.0	0.819	1.71	<3.0
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	2-Feb-12	D	<15	0.102	0.59	64.7	<0.025	445	0.040	158,000	<2.5	<0.25	<2.5	<30	<0.25	22.2	94,100	48.3	1.84	1.1	<1.0	943,000	0.023	<1.0	0.704	0.71	<15
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	D	<15	0.146	0.65	48.8	<0.025	432	0.028	144,000	<2.5	<0.25	<2.5	<30	<0.25	22.5	78,300	28.9	1.85	<1.0	<1.0	774,000	0.014	<1.0	0.673	0.99	<15
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Apr-12	D	<5.0	<0.50	<2.0	105	<0.50	610	<0.050	168,000	<0.50	0.120	1.80	<10	<0.30	41	152,000	18.8	<2.0	2.42	<2.0	1,400,000	<0.050	<5.0	0.698	0.72	17.9
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-May-12	D	<5.0	<0.50	<2.0	108	<0.50	500	<0.050	188,000	<0.50	0.692	<0.50	250	<0.30	29	137,000	1,140	2.4	2.66	<2.0	980,000	<0.050	<5.0	0.626	0.85	4.5
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	D	<2.0	0.077	0.45	68.8	<0.010	290	0.136	212,000	<1.0	<0.10	<0.40	<30	<0.10	21.7	115,000	376	1.52	2.55	<0.40	727,000	0.0225	<0.40	0.367	0.59	9.3
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	6-Jul-12	D	<5.0	<0.50	<2.0	157	<0.50	760	0.139	259,000	<0.50	0.092	0.80	<90	<0.30	37	244,000	125	<2.0	3.55	<2.0	1,680,000	<0.050	<5.0	0.768	0.65	14.9
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	3-Aug-12	D	<5.0	<0.50	<2.0	103	<0.50	1,540	0.145	219,000	<0.50	0.065	1.37	<10	<0.30	66	396,000	53.3	<2.0	2.62	<2.0	3,250,000	0.078	<5.0	0.611	0.61	7.1
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	D	<5.0	<0.50	<2.0	45.6	<0.50	480	0.081	235,000	<0.50	0.166	0.55	145	<0.30	30	174,000	474	3.3	3.37	<2.0	1,060,000	<0.050	<5.0	0.771	0.88	5.2
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	138	<0.50	1,050	0.239	311,000	<0.50	0.127	0.73	123	<0.30	48	354,000	460	<2.0	5.09	<2.0	2,600,000	<0.050	<5.0	1.06	0.55	6.0
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Nov-12	D	<5.0	<0.50	<2.0	91.1	<0.50	1,230	0.072	196,000	<0.50	0.087	0.90	37	<0.30	50	254,000	40.1	2.0	2.03	<2.0	2,510,000	<0.050	<5.0	1.30	0.77	11.7
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	<2.0	36.3	<0.50	1,100	<0.050	85,500	<0.50	0.055	0.70	24	<0.30	30	90,100	34.2	2.2	1.38	<2.0	1,190,000	<0.050	<5.0	0.378	0.53	17.5
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	38.8	<0.50	640	<0.050	121,000	<0.50	<0.050	0.55	<10	<0.30	28	149,000	11.0	<2.0	0.87	<2.0	1,400,000	<0.050	<5.0	0.294	<0.50	7.8
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	D	<5.0	<0.50	<2.0	30.0	<0.50	810	<0.050	102,000	<0.50	0.059	1.20	<10	<0.30	25	122,000	2.07	<2.0	2.70	<2.0	1,230,000	<0.050	<5.0	0.401	0.61	15.9
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Jun-13	D	3.8	0.067	0.617	25.6	<0.0050	157	0.124	215,000	<0.50	0.195	0.60	40	<0.050	12.5	69,700	893	2.14	2.68	<0.20	302,000	0.0079	<0.20	0.231	0.605	5.7
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Jun-13	T	11,100	0.185	2.99	83.7	0.254	189	0.307	219,000	11.4	5.49	22.1	12,200	6.23	20.9	76,000	2,160	2.66	10.4	<0.20	338,000	0.103	458	0.543	35.5	50.0
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	D	<5.0	<0.50	<2.0	149	<0.50	750	0.189	270,000	<0.50	0.148	0.64	14	<0.30	32	271,000	306	<2.0	3.01	<2.0	1,860,000	<0.050	<5.0	0.342	<0.50	8.0
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	T	10,700	<0.50	4.5	186	<0.50	700	0.275	300,000	14.1	5.26	23.3	15,000	5.75	38	270,000	854	<2.0	10.7	<2.0	1,800,000	0.118	494	0.784	42.6	45.1
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	D	<5.0	<0.50	<2.0	108	<0.50	760	0.081	226,000	<0.50	0.078	0.73	<10	<0.30	26	214,000	32.1	<2.0	0.67	<2.0	1,700,000	<0.050	<5.0	0.353	<0.50	4.4
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	T	1,450	<0.50	<2.0	118	<0.50	800	0.117	229,000	1.40	0.828	3.47	1,990	0.87	28	221,000	435	<2.0	2.55	<2.0	1,800,000	<0.050	70.9	0.422	5.60	12.8
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	D	<5.0	<0.50	<2.0	37.5	<0.50	720	<0.050	84,200	<0.50	0.127	1.26	<10	<0.30	22	102,000	64.0	<2.0	1.01	<2.0	1,090,000	<0.050	<5.0	0.152	<0.50	8.3
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	T	4,730	<0.50	2.5	68.8	<0.50	730	0.079	87,700	5.85	2.64	11.4	6,540	3.47	27	101,000	593	<2.0	5.11	<2.0	1,100,000	<0.050	203	0.323	16.5	25.5
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	D	<5.0	<0.50	<2.0	68.2	<0.50	620	<0.050	177,000	<0.50	0.054	1.57	<10	<0.30	28	180,000	8.83	<2.0	1.07	<2.0	1,230,000	<0.050	<5.0	0.169	<0.50	7.4
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	T	1,040	<0.50	<2.0	78.9	<0.50	640	<0.050	190,000	1.40	0.667	3.65	1,470	1.01	30	196,000	239	<2.0	2.25	<2.0	1,400,000	<0.050	47.0	0.230	4.22	14.2
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	D	<5.0	<0.50	<2.0	243	<0.50	1,800	0.255	310,000	<0.50	<0.050	1.51	<10	<0.30	72	587,000	12.0	<2.0	1.62	<2.0	4,090,000	0.054	<5.0	0.272	<0.50	9.5
PR2-8S	Porewater EAZ	PR2-8	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	T	2,050	<0.50	<2.0	250	<0.50	1,780	0.254	308,000	1.86	1.11	4.52	2,560	1.21	72	591,000	293	<2.0	3.46	<2.0	4,060,000	0.065	90.1	0.350	7.15	14.9
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	7-Oct-11	D	<5.0	<0.50	<2.0	142	<0.50	<10	0.098	178,000	<0.50	2.57	<0.50	<10	<0.30	<20	43,000	2,640	2	6.14	<2.0	125,000	<0.050	<5.0	0.211	<0.50	38.9
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Dec-11	D	<5.0	<0.50	<2.0	158	<0.50	<10	0.053	223,000	<0.50	2.26	<0.50	31	<0.30	<20	69,700	3,280	<2.0	2.06	<2.0	246,000	<0.050	<5.0	0.153	<0.50	10.4
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	5-Jan-12	D	<5.0	<0.50	<2.0	135	<0.50	<100	0.091	212,000	<0.50	2.3	<0.50	<10	<0.30	<20	57,800	2,990	<2.0	5.16	<2.0	159,000	<0.050	<5.0	0.165	0.51	39.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	2-Feb-12	D	<3.0	0.024	0.501	146	<0.0050	54.8	0.0408	223,000	<0.50	2.00	<0.50	31	<0.050	4.34	58,000	3,010	0.931	1.90	<0.20	139,000	0.0161	<0.20	0.13	0.335	6.7
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Mar-12	D	<3.0	0.036	0.334	144	<0.0050	47.7	0.0691	200,000	<0.50	2.09	0.65	<30	<0.050	3.31	50,100	2,860	0.822	3.01	<0.20	111,000	0.0163	<0.20	0.123	0.536	14.4
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Apr-12	D	<6.0	0.047	2.02	174	<0.010	129	0.064	199,000	<1.0	2.89	<1.0	342	<0.10	7.91	73,400	3,220	1.28	4.62	0.59	327,000	0.0097	<0.40	0.167	0.26	11.1
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-May-12	D	<3.0	0.039	1.15	126	<0.0050	84.2	0.0583	189,000	<0.50	2.75	<0.50	186	<0.050	4.82	59,000	3,140	1.02	3.93	<0.20	206,000	0.0068	<0.20	0.120	0.185	39.7
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Jun-12	D	<5.0	<0.50	6.0	66.3	<0.50	2,490	0.074	371,000	<0.50	2.52	<0.50	3,740	<0.30	93	702,000	2,240	4.2	2.68	<2.0	5,760,000	<0.050	<5.0	1.69	1.22	4.4
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	6-Jul-12	D	<5.0	<0.50	6.6	95.6	<0.50	1,080	<0.050	282,000	<0.50	0.567	<0.50	510	<0.30	29	282,000	3,810	<2.0	<0.50	<2.0	2,270,000	<0.050	<5.0	0.650	1.14	<3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	3-Aug-12	D	9.7	<0.50	8.2	87.4	<0.50	1,290	<0.050	227,000	<0.50	0.194	<0.50	224	<0.30	41	289,000	2,900	<2.0	4.26	<2.0	2,570,000	<0.050	<5.0	0.545	0.85	<3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Sep-12	D	<5.0	<0.50	<2.0	88.1	<0.50	530	<0.050	141,000	<0.50	1.80	<0.50	968	<0.30	<20	98,400	1,920	<2.0	1.14	<2.0	984,000	<0.050	<5.0	0.167	<0.50	24.5
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	147	<0.50	1,660	<0.050	339,000	<0.50	1.36	<0.50	12	<0.30	52	412,000	3,320	<2.0	2.56	<2.0	3,380,000	<0.050	<5.0	0.574	<0.50	3.9
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	8-Nov-12	D	<5.0	<0.50	<5.0	84.6	<0.50	1,510	<0.050	279,000	<0.50	0.777	<0.50	1,630	<0.30	54	385,000	3,490	<2.0	<0.50	<2.0	3,400,000	<0.050	<5.0	0.365	<0.50	<3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	13-Dec-12	D	<5.0	<0.50	2.9	77.5	<0.50	1,710	<0.050	244,000	<0.50	0.786	<0.50	1,180	<0.30	61	354,000	1,620	2.2	<0.50	<2.0	3,110,000	<0.050	<5.0	0.582	<0.50	3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	73.0	<0.50	2,780	<0.050	416,000	<0.50	1.48	<0.50	625	<0.30	85	788,000	2,240	4.4	2.32	<2.0	6,440,000	<0.050	<5.0	1.00	<0.50	4.8
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	11-Mar-13	D	12.1	<0.50	17.4	50.6	<0.50	1,830	<0.050	261,000	<0.50	0.190	<0.50	<10	<0.30	45	367,000	2,620	<2.0	1.20	<2.0	2,960,000	<0.050	<5.0	0.591	1.32	<3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Jun-13	D	7.2	<0.50	<6.0	70.0	<0.50	2,190	<0.050	300,000	<0.50	0.182	<0.50	17	<0.30	90	560,000	1,370	<2.0	0.82	9.3	4,880,000	<0.050	<5.0	0.428	0.69	<3.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	19-Sep-13	D	2.8	0.042	1.94	20.1	<0.0050	263	<0.0050	117,000	<0.50	0.172	<0.20	210	<0.050	8.62	55,000	1,020	0.259	0.52	1.28	298,000	<0.0020	<0.20	0.0230	0.238	2.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	12-Dec-13	D	2.7	0.033	1.54	23.6	<0.0050	166	0.0147	161,000	<0.50	0.136	<0.20	313	0.273	7.92	53,500	1,500	<0.050	0.43	<0.20	176,000	<0.0020	<0.20	0.0145	0.118	3.2
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	14-Mar-14	D	2.6	0.016	1.61	42.5	<0.0050	68.8	0.0156	178,000	<0.50	0.372	0.40	1,180	<0.050	5.15	45,100	2,180	0.418	0.33	<0.20	93,400	<0.0020	<0.20	0.0794	0.106	4.5
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Jun-14	D	1.1	<0.010	1.66	47.1	<0.0050	55.9	<0.0050	181,000	<0.50	0.188	<0.20	1,120	<0.050	5.60	45,600	2,270	0.243	<0.20	<0.20	83,100	<0.0020	<0.20	0.0237	0.099	<1.0
PR2-8I	Porewater	PR2-8	NA	RL	2.7-3.1	2.7	3.1	Weathered Colluvium	---	9-Sep-14	D	<5.0	0.61	15	29.8	<0.50	3,240	<0.050	377,000	<0.50	0.155	<0.50	19	<0.30	127	976,000	556	<2.0	1.27	11.2	8,590,000	<0.050	<5.0	1.91	1.40	<3.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11	D	<5.0	<0.50	<2.0	144	<0.50	<10	<0.050	200,000	<0.50	0.852	<0.50	<10	<0.30	<20	34,500	2,310	<2.0	1.03	<2.0	27,000	<0.050	<5.0	<0.050	<0.50	20.5
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Dec-11	D	<5.0	<0.50	<2.0	158	<0.50	<10	<0.050	203,000	<0.50	0.892	<0.50	938	<0.30	<20	33,700	2,400	<2.0	<0.50	<2.0	27,000	<0.050	<5.0	<0.050	<0.50	18.4
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	5-Jan-12	D	6.9	<0.50	<2.0	151	<0.50	<100	<0.050	211,000	<0.50	0.801	<0.50	46	<0.30	<20	36,000	2,440	<2.0	0.63	<2.0	28,500	<0.050	<5.0	<0.050	<0.50	26.6
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	2-Feb-12	D	<3.0	<0.010	0.538	158	<0.0050	34.9	<0.0050	215,000	<0.50	0.822	<0.50	112	<0.050	0.43	36,100	2,450	0.519	0.50	<0.20	28,800	0.0031	<0.20	0.022	<0.050	15.9
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Mar-12	D	<3.0	0.012	0.789	161	<0.0050	35.4	0.0056	208,000	<0.50	0.850	<0.50	<30	<0.050	0.53	34,800	2,430	0.607	0.56	<0.20	27,200	0.0034	<0.20	0.0257	<0.050	6.5
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Apr-12	D	<6.0	<0.020	0.93	191	<0.010	168	0.021	216,000	<1.0	0.82	<1.0	347	<0.10	6.30	72,600	2,650	0.90	1.31	<0.40	344,000	0.0061	<0.40	0.141	<0.10	9.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-May-12	D	<3.0	0.027	1.55	171	<0.0050	41.4	0.0167	206,000	<0.50	0.808	<0.50	1,820	<0.050	0.76	37,100	2,440	0.447	0.57	<0.20	42,600	0.0039	<0.20	0.0261	<0.050	13.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	D	<1.0	<0.010	3.06	165	<0.0050	29.1	0.0132 J	204,000	<0.50	0.828	0.34 J	3,590	<0.050	0.43	33,500	2,470	0.452	0.45	<0.20	23,700	<0.0020	<0.20	0.0194	<0.050	3.2 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12	D	<1.0	<0.010	2.12	172	<0.0050	37.9	0.0051	209,000	<0.50	0.742	0.28 J	2,370	<0.050	0.72	39,300	2,420	0.442	0.40	<0.20	52,600	<0.0020	<0.20	0.0302	<0.050	2.7 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	3-Aug-12	D	1.7	0.027	2.79	165	<0.0050	36.5	0.0078	205,000	<0.50	0.762	0.99	3,470	0.054	0.57	34,400	2,310	0.414	0.45	<0.20	27,500	0.0073	<0.20	0.0164	<0.050	4.1
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	D	<1.0	<0.010	3.35	173	<0.0050	34.7	<0.0050	207,000	<0.50	0.774	<0.20 UJ	3,640	<0.050	0.37	37,300	2,500	0.393	0.37	<0.20	25,700	<0.0020	<0.20	0.0178	<0.050	2.1 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Oct-12	D	<1.0	0.011	2.29	169	<0.0050	36.9	0.0116	221,000	<0.50	0.708	0.31	2,580	<0.050	0.45	36,200	2,510	0.358	0.66	<0.20	30,700	0.0028	<0.20	0.016	<0.050	3.7
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Nov-12	D	<1.0	<0.010	2.04	170	<0.0050	35.5	<0.0050	221,000	<0.50	0.763	0.33	2,660	<0.050	0.50	38,400	2,530	0.334	0.42	<0.20	25,700	0.0031	<0.20	0.0143	<0.050	2.4
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	D	<1.0	<0.010	0.755	186	<0.0050	59.9	<0.0050	208,000	<0.50	0.621	<0.20	247	<0.050	0.54	37,200	1,970	0.392	0.33	<0.20	29,300	<0.0020	<0.20	0.0167	<0.050	3.8 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jan-13	D	<1.0	0.010	0.927	166	<0.0050	41.9	<0.0050	211,000	<0.50	0.674	<0.20	332	<0.050	0.48	36,200	2,110	0.340	0.55	<0.20	26,700	0.004	<0.20	0.0142	<0.050	2.4
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	11-Mar-13	D	<1.0	<0.010	1.05	170	<0.0050	35.5	<0.0050	217,000	<0.50	0.716	0.33	977	<0.050	0.47	37,200	2,200	0.329	0.48	<0.20	25,900	0.0038	<0.20	0.0142	<0.050	3.5
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Jun-13	D	4.8	0.184	3.45	179	<0.0050	36.3	0.0125	217,000	<0.50	0.793	0.57	4,790	<0.050	0.26	37,200	2,500	0.792	0.60	<0.20	27,200	0.0029	<0.20	0.0252	<0.050	3.9
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13	D	<1.0	0.033	3.31	177	<0.0050	39.4	0.120	209,000	<0.50	0.838	0.43	3,500	<0.050	0.34	35,400	2,340	0.361	0.79	<0.20	24,700	0.0041	<0.20	0.0157	<0.050	5.8
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13	D	<1.0 UJ	0.022	0.598	172	<0.0050	43.7	0.0497 J	220,000	<0.50	0.731	0.21	228	0.058	0.37	38,200	2,380	0.264	0.62	<0.20	27,900	0.0045	<0.20	0.0133	<0.050	3.4 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Mar-14	D	<1.0	<0.010	0.806	176	<0.0050	34.7	0.0096	227,000	<0.50	0.742	0.42	1,130	<0.050	0.50	37,300	2,330	0.288	0.62	<0.20	26,800	0.0033	<0.20	0.0147	<0.050	4.0
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	D	<1.0	0.013	2.46	177	<0.0050	34.6 J	0.0062 J	223,000	<0.50	0.771	0.68 J	3,620	<0.050	0.46 J	38,000	2,420	0.267	2.05 J	<0.20	27,100	0.0046	<0.20	0.0164	<0.050	6.4 J
PR2-8D	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Sep-14	D	<5.0	<0.50	7.2	101	<0.50	590	<0.050	280,000	<0.50	0.916	0.88	6,070	<0.30	<20	175,000	2,960	<2.0	0.78	<2.0	1,260,000	<0.050	<5.0	0.568	<0.50	4.1
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	12-Mar-12	D	7.8	0.135	0.34	53.8	<0.010	144	0.224	46,300	<1.0	6.61	1.4	35	<0.10	16.2	55,600	1,710	2.11	13.3	<0.40	334,000	0.0641	<0.40	0.268	0.95	356
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Jun-12	D	4.4	0.256	2.40	39.3	<0.0050	53.2	0.140	24,000	<0.50	4.98	0.69	2,750	0.064	10.0	21,400	1,190	2.71	4.12	<0.20	94,800	0.0086	<0.20	0.0909	0.591	31.1
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Sep-12	D	<5.0	<0.50	<2.0	157	<0.50	1,070	<0.050	203,000	<0.50	18.8	<0.50	735	<0.30	56	329,000	8,330	2.8	17.5	<2.0	2,330,000	<0.050	<5.0	1.10	<0.50	21.7
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-12	D	<2.0	0.103	0.99	52.8	<0.010	343	<0.010	49,100	<1.0	3.37	<0.40	519	<0.10	24.2	67,000	1,340	1.72	10.4	<0.40	578,000	<0.0040	<0.40	0.329	0.45	50.9
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	11-Mar-13	D	1.8	0.038	2.26	55.0	<0.0050	257	0.0811	38,500	<0.50	5.79	0.53	3,910	<0.050	17.8	62,900	1,220	1.24	5.67	0.20	505,000	0.0069	<0.20	0.147	0.328	17.9
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	18-Jun-13	D	2.6	0.042	5.36	36.1	0.0061	107	0.0085	23,900	<0.50	4.14	0.26	7,690	<0.050	11.2	25,900	913	1.06	4.36	<0.20	171,000	<0.0020	<0.20	0.0649	0.801	8.4
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Jun-13	T	15,000	0.142	5.19	106	0.366	118	0.125	21,000	13.4	9.68	26.8	18,700	4.94	18.5	26,100	1,120	2.14	11.3	0.23	165,000	0.0634	427	0.559	42.7	48.3
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	D	5.0	0.746	3.78	47.1	<0.0050	119	<0.0050	21,300	<0.50	1.02	0.58	643	<0.050	9.89	19,800	405	2.57	23.3	<0.20	171,000	<0.0020	<0.20	0.160	1.91	6.2
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	19-Sep-13	T	21,300	0.535	6.75	157	0.471	137	0.151	22,900	23.0	11.6	37.0	24,700	7.31	21.9	29,300	769	2.90	49.2	0.37	171,000	0.0977	708	0.960	72.2	62.9
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	D	2.9	0.201	2.60	42.5	<0.0050	75.7	0.0083	26,800	<0.50	2.19	0.34	1,410	0.097	8.12	23,200	400	1.10	2.82	<0.20	118,000	<0.0020	<0.20	0.0779	0.441	7.9
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	13-Dec-13	T	8,750	0.278	4.25	99.2	0.214	93.6	0.0611	23,900	8.39	6.09	14.3	11,300	2.78	13.6 J+	25,800	486	1.20	6.93	<0.20	122,000	0.0311	302	0.368	28.2	29.1
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	D	<5.0	<0.50	<2.0	41.9	<0.50	<100	<0.050	29,000	<0.50	1.89	<0.50	3,440	<0.30	<20	24,000	713	<2.0	4.55	<0.20	66,300	<0.050	<5.0	<0.050	<0.50	9.6
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	14-Mar-14	T	302,000	<0.50	46.9	2,490	11.0	150	5.46	145,000	420	243	939	522,000	197	235	200,000	9,190	6.9	275	3.3	104,000	2.53	1,600	17.0	1,100	1,510
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	D	1.6	0.086	1.53	28.6	<0.0050	54.7	0.0278	26,100	<0.50	1.33	0.84	1,700	0.211	9.01	26,400	385	0.493	2.28	<0.20	63,900	<0.0020	<0.20	0.0376	0.747	10.7
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	9-Jun-14	T	6,830	0.086 J+	2.80	94.5	0.369	51.3	0.129	26,800	9.50	6.99	21.8	14,300	2.99	12.9	28,500	641	0.540	7.81	<0.20	58,600	0.0402	149	0.533	33.3	39.6

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	D	1.0	0.129	1.29	55.5	<0.0050	108	<0.0050	23,100	<0.50	0.704	0.58	581	<0.050	15.3	17,700	188	0.753	6.16	<0.20	178,000	<0.0020	<0.20	0.0396	0.658	4.9
PEC-5S	Porewater EAZ	PEC-5	NA	RL	0.8-1.0	0.8	1.0	Weathered Colluvium	---	8-Sep-14	T	17,400	0.173	4.29	169	0.456	125	0.105	26,200	17.5	9.00	31.9	23,500	6.91	28.9	25,100	557	1.38	15.3	0.23	175,000	0.0659	508	0.691	65	49.3
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	12-Mar-12	D	<30	0.13	<0.50	74.4	<0.050	1,040	0.230	236,000	<5.0	21.1	<5.0	<90	<0.50	26.0	237,000	17,800	2.81	10.5	<2.0	1,890,000	0.035	<2.0	1.76	<0.50	<30
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Jun-12	D	3.4	0.082	1.35	57.7	<0.010	439	0.029	63,900	<1.0	6.91	0.46	991	<0.10	12.9	56,800	4,880	3.28	3.18	<0.40	645,000	0.0052	<0.40	0.718	0.54	8.6
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Sep-12	D	<5.0	<0.50	2.3	92.3	<0.50	470	<0.050	69,100	<0.50	4.30	<0.50	2,160	<0.30	<20	80,500	5,190	<2.0	2.41	<2.0	878,000	<0.050	<5.0	0.222	<0.50	<3.0
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12	D	<2.0 UJ	0.091	1.09	57.6	<0.010	373	0.023 J	32,100	<1.0	2.23	<0.40 UJ	664	<0.10	10.6	28,300	1,460	2.94	5.02	<0.40	405,000	0.0052	<0.40	0.403	0.20	5.9
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	11-Mar-13	D	1.4	0.078	0.624	30.4	<0.0050	123	0.0061	13,200	<0.50	0.908	0.32	101	<0.050	6.49	10,400	421	1.74	2.97	<0.20	184,000	0.0030	<0.20	0.180	0.305	6.3
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Jun-13	D	2.1 J	0.065	0.392	36.8	<0.0050	59.7	0.0476	15,300	<0.50	2.28	0.45	122	0.091	4.78	11,500	909	0.829	10.3	<0.20	132,000	0.0076	<0.20	0.0499	0.125	9.7
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	19-Sep-13	D	2.1	0.054	0.915	50.9	<0.0050	53.7	0.0119	21,100	<0.50	4.46	0.24	676	<0.050	4.74	14,000	1,630	0.824	3.10	<0.20	91,400	<0.0020	<0.20	0.0418	0.185	6.0
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-13	D	1.0	0.173	0.404	37.4	<0.0050	63.8	0.0427	23,300	<0.50	1.28	0.62	47	0.080	5.43	15,900	472	0.584	3.48	<0.20	108,000	<0.0020	<0.20	0.0744	0.308	14.0
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	14-Mar-14	D	9.8	<0.50	<2.0	69.0	<0.50	1,640	0.219	215,000	<0.50	10.6	0.91	323	<0.30	55	435,000	5,660	2.5	7.87	<2.0	3,570,000	<0.050	<5.0	0.579	0.74	12.2
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	9-Jun-14	D	1.2	0.082	0.299	51.8	<0.0050	298	0.0470	37,300	<0.50	0.454	0.76	<30	<0.050	13.6	44,200	1,060	0.557	3.77	<0.20	494,000	0.0067	<0.20	0.0978	0.236	7.8
PEC-5I	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	8-Sep-14	D	<1.0	0.044	0.229	47.3	<0.0050	72.0	0.0272	34,500	<0.50	0.162	0.68	<30	<0.050	6.59	26,300	188	0.098	1.31	<0.20	117,000	0.0033	<0.20	0.0492	0.144	4.0
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-12	D	<3.0	0.022	1.14	165	<0.0050	22.9	0.0123	70,200	<0.50	1.06	<0.50	6,950	<0.050	1.56	22,400	787	0.130	0.69	<0.20	27,200	0.0066	<0.20	0.0179	<0.050	8.5
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	8-Jun-12	D	1.3	<0.010	1.86	168	0.0075	18.8	0.0147	67,000	<0.50	1.04	0.33 J	8,590	<0.050	1.40	20,300	752	0.137	0.67	<0.20	22,800	<0.0020	<0.20	0.0129	<0.050	3.3
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	14-Sep-12	D	1.0	<0.010	2.23	186	0.0062	22.4	<0.0050	73,100	<0.50	1.14	<0.20	9,170	<0.050	1.55	22,200	824	0.115	0.79	<0.20	25,900	0.0026	<0.20	0.0244	<0.050	3.2
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-12	D	<1.0	<0.010	3.05	190	0.0074	32.3	<0.0050	74,000	<0.50	0.947	<0.20	8,900	<0.050	1.18	23,600	676	0.093	0.65	<0.20	25,400	<0.0020	<0.20	0.0185	0.068	2.3
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	D	<1.0	<0.010	2.26	180	0.0080	29.8 J	<0.0050	71,000	<0.50	1.28	<0.20	9,720	<0.050	1.41	22,400	750	0.147	0.74	<0.20	25,200	<0.0020	<0.20	0.0227	<0.050	1.9 J
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Jun-13	D	<1.0	<0.010	2.53	175	0.0050	21.3	<0.0050	72,000	<0.50	1.24	<0.20	10,100	<0.050	0.98	22,700	804	0.126	0.77	<0.20	26,300	<0.0020	<0.20	0.0193	<0.050	1.4
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	D	<1.0	0.014 J	2.61	181	0.0066	22.7	0.0982 J	69,000	<0.50	1.24	0.21	9,390	<0.050	1.07	21,500	743	0.158 J	1.11 J	<0.20	25,100	0.0020	<0.20	0.0129	<0.050	5.6 J
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5	Colluvium	---	13-Dec-13	D	<1.0	0.019	2.61	179	0.0056	24.2	0.0075	74,300	<0.50	1.13	0.21	9,890	<0.050	1.3	23,400	784	0.11	0.92	<0.20	27,000	0.0022	<0.20	0.0141	<0.050	3.8
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5	Colluvium	---	14-Mar-14	D	<1.0	<0.010	2.43	184	0.0059	19.8	0.0054 J	76,800	<0.50	1.06	<0.20	10,200	<0.050	1.22	23,500	791.00	0.107	0.82	<0.20	26,900	<0.0020	<0.20	0.0119	<0.050	2.0 J
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5	Colluvium	---	9-Jun-14	D	1.6 J	<0.010	2.08	187	0.0054 J	21.2	<0.0050	74,300	<0.50	1.17	0.50 J	9,560	<0.050	1.51 J	24,100	763	0.088	0.93 J	<0.20	26,200	0.0029	<0.20	0.0110	<0.050	3.2 J
PEC-5D	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5	Colluvium	---	8-Sep-14	D	<1.0	<0.010	2.76	204	0.0101	23.5	0.0061	74,900	<0.50	1.16	0.31	9,870	<0.050	1.40	24,500	840	0.059	0.72	<0.20	27,500	0.0034	<0.20	0.0023	<0.050	4.4
Seawater																																				
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	13-Mar-12	D	9.5	<0.50	<2.0	9.2	<0.50	3,840	0.095	302,000	<0.10	<0.050	0.95	<10	<0.30	147	927,000	3.48	9.2	0.59	<2.0	7,630,000	<0.050	<5.0	2.47	1.28	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	6-Jun-12	D	37.2	<0.50	<2.0	8.0	<0.50	2,820	0.083	249,000	0.55	<0.050	1.06	<10	<0.30	112	817,000	2.10	7.3	<0.50	<2.0	7,370,000	<0.050	<5.0	2.06	1.19	3.9
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.6	<0.50	3,860	0.073	323,000	<0.50	<0.050	0.94	<10	<0.30	149	941,000	4.25	8.9	<0.50	<2.0	8,480,000	<0.050	<5.0	2.56	1.33	4.3
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	18-Sep-12	T	59.5	<0.50	<2.0	9.8	<0.50	3,870	0.092	325,000	<0.50	0.067	0.99	84	<0.30	153	978,000	7.20	9.1	0.51	<2.0	8,870,000	<0.050	<5.0	2.57	1.63	3.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	13-Nov-12	D	18.7	<0.50	<2.0	8.5	<0.50	3,070	0.104	239,000	<0.50	<0.050	0.8	<10	<0.30	122	782,000	4.54	7	<0.50	<2.0	5,980,000	<0.050	<5.0	1.87	1.11	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	13-Nov-12	T	30.0	<0.50	<2.0	8.4	<0.50	3,040	0.106	238,000	<0.50	<0.050	1.55 J	25	<0.30	125	806,000	4.84	7.3	<0.50	<2.0	5,950,000	<0.050	<5.0	1.89	1.17	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	10-Dec-12	D	16.8	<0.50	<2.0	8.6	<0.50	3,310	<0.050	234,000	<0.50	<0.050	0.61	<10	<0.30	111	744,000	3.26	7.4	<0.50	<2.0	6,570,000	<0.050	<5.0	1.91	1.03	5.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	10-Dec-12	T	45.2	<0.50	<2.0	8.7	<0.50	3,100	<0.050	229,000	<0.50	<0.050	1.01	27	<0.30	107	713,000	4.03	7.2	<0.50	<2.0	6,430,000	<0.050	<5.0	1.88	1.11	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.1	<0.50	3,540	<0.050	294,000	<0.50	0.172	<0.50	<10	<0.30	126	897,000	3.52	8.3	<0.50	<2.0	7,830,000	<0.050	<5.0	2.18	1.04	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Jan-13	T	35.0	<0.50	<2.0	8.8	<0.50	3,550	<0.050	305,000	<0.50	<0.050	1.82	41	<0.30	128	929,000	3.87	8.2	<0.50	<2.0	7,940,000	<0.050	<5.0	2.19	1.18	7.2
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	11-Mar-13	D	9.2	<0.50	<2.0	7.8	<0.50	3,460	<0.050	251,000	<0.50	<0.050	0.52 J	<10	<0.30	124	760,000	3.96	7.8	<0.50	<2.0	6,780,000	<0.050	<5.0	1.96	1.07	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	11-Mar-13	T	24.1	<0.50	<2.0	8.1	<0.50	3,450	<0.050	252,000	<0.50	<0.050	<0.50	19	<0.30	124	765,000	4.44	7.8	<0.50	<2.0	6,820,000	<0.050	<5.0	1.97	1.23	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	24-Jun-13	D	6.9	<0.50	<2.0	10.7	<0.50	2,790	<0.050	228,000	<0.50	0.065	0.99	<10	<0.30	123	755,000	4.23	7.2	<0.50	<4.0	5,520,000	<0.050	<5.0	2.01	1.28	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	24-Jun-13	T	32.4	<0.50	<2.0	9.7	<0.50	2,780	<0.050	230,000	<0.50	<0.050	0.95	32	<0.30	127	767,000	4.90	7.0	<0.50	<2.0	5,650,000	<0.050	<5.0	1.90	1.30	3.8
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.2	<0.50	3,690	<0.050	314,000	<0.50	0.134	0.74	<10	<0.30	139	984,000	3.06	8.7	0.64	<2.0	7,760,000	<0.050	<5.0	2.50	1.31	4.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	20-Sep-13	T	17.1	<0.50	<2.0	10.3	<0.50	3,650	<0.050	308,000	<0.50	<0.050	0.52	21	<0.30	137	979,000	3.31	8.5	<0.50	<2.0	7,680,000	<0.050	<5.0	2.34	1.46	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.5	<0.50	3,580	0.051	299,000	<0.50	0.056	<0.50	<10	<0.30	137	898,000	3.16	8.7	<0.50	<2.0	7,730,000	<0.050	<5.0	2.37	1.26	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Dec-13	T	30.8	<0.50	<2.0	9.4	<0.50	3,580	0.075	308,000	<0.50	0.052	2.93	51	<0.30	137	920,000	4.01	8.7	19.7	<2.0	7,880,000	<0.050	<5.0	2.43	1.49	3.8
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Mar-14	D	18.8	<0.50	<2.0	8.9	<0.50	3,000	<0.050	214,000	<0.50	0.086	0.86	<10	<0.30	114	670,000	5.87	7.1	<0.50	<2.0	5,680,000	<0.050	<5.0	1.78	0.99	4.8
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Mar-14	T	56.5	<0.50	<2.0	8.4	<0.50	2,840	<0.050	203,000	<0.50	<0.050	0.63	35	<0.30	105	641,000	7.34	6.5	<0.50	<2.0	5,340,000	<0.050	<5.0	1.65	1.00	3.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	13-Jun-14	D	7.0	<0.50	<2.0	10.7	<0.50	3,400	<0.050	248,000	<0.50	0.067	1.06	<10	<0.30	133	765,000	3.36	7.7	0.74	<2.0	6,800,000	<0.050	<5.0	2.04	1.34	3.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	13-Jun-14	T	24.3	<0.50	<2.0	10.9	<0.50	3,420	<0.050	248,000	<0.50	0.067	0.78	36	<0.30	135	778,000	6.27	7.5	<0.50	<2.0	6,830,000	<0.050	<5.0	2.00	1.33	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.5	<0.50	3,810	<0.050	310,000	<0.50	<0.050	0.61	<10	<0.30	152	947,000	3.46	7.9	<0.50	<2.0	8,380,000	<0.050	<5.0	2.51	1.35	6.8
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	12-Sep-14	T	28.6	<0.50	<2.0	9.5	<0.50	3,970	<0.050	317,000	<0.50	<0.050	0.58	29	<0.30	155	957,000	4.11	8.3	<0.50	<2.0	8,700,000	<0.050	<5.0	2.43	1.34	7.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	10-Mar-15	D	24.1	<0.50	<2.0	10.6	<0.50	3,930	<0.050	299,000	<0.50	<0.050	1.10	<10	<0.30	97	910,000	2.47	8.4	<0.50	<2.0	7,720,000	<0.050	<5.0	2.27	1.16	4.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	10-Mar-15	T	14.2	<0.50	<2.0	9.7	<0.50	4,020	<0.050	304,000	<0.50	<0.050	0.62	22	<0.30	105	959,000	2.79	8.5	<0.50	<2.0	7,840,000	<0.050	<5.0	2.37	1.23	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.7	<0.50	3,260	<0.050	295,000	<0.50	<0.050	0.63	<10	<0.30	95	870,000	3.73	7.2	<0.50	<2.0	7,810,000	<0.050	<5.0	2.01	1.18	3.6
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	17-Jun-15	T	33.0	<0.50	<2.0	8.7	<0.50	3,370	<0.050	309,000	<0.50	<0.050	<0.50	46	<0.30	96	914,000	4.41	7.3	<0.50	<2.0	8,090,000	<0.050	<5.0	2.00	1.23	3.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.0	<0.50	3,390	<0.050	319,000	<0.50	0.055	1.11	<10	<0.30	125	924,000	3.48	8.0	0.68	<2.0	8,170,000	<0.050	<5.0	2.29	1.26	6.6
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Sep-15	T	12.2	<0.50	<2.0	10.0	<0.50	3,790	<0.050	324,000	<0.50	<0.050	0.67	22	<0.30	136	960,000	4.24	9.1	0.53	<2.0	8,420,000	<0.050	<5.0	2.47	1.41	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Dec-15	D	21.0	<0.50	<2.0	7.3	<0.50	2,670	0.088	218,000	<0.50	<0.050	0.69	<10	<0.30	104	704,000	3.26	5.4	<0.50	<2.0	5,580,000	<0.050	<5.0	1.49	0.89	6.4
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Dec-15	T	85.9	<0.50	<2.0	6.7	<0.50	2,600	<0.050	217,000	<0.50	<0.050	0.60	73	<0.30	94	714,000	4.55	5.0	<0.50	<2.0	5,610,000	<0.050	<5.0	1.45	1.06	4.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	26-Feb-16	D	8.7	<0.50	<2.0	9.9	<0.50	3,270	<0.050	295,000	<0.50	<0.050	1.04	<10	<0.30	137	911,000	3.26	8.5	<0.50	<2.0	8,890,000	<0.050	<5.0	2.33	1.28	16.7
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	26-Feb-16	T	39.3	<0.50	<2.0	9.1	<0.50	3,310	<0.050	292,000	<0.50	<0.050	0.96	38	<0.30	131	905,000	4.09	8.4	<0.50	<2.0	8,710,000	<0.050	<5.0	2.27	1.30	8.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.0	<0.50	3,070	0.075	306,000	<0.50	<0.050	0.92	<10	<0.30	127	901,000	3.12	8.1	<0.50	<2.0	7,890,000	<0.050	<5.0	2.46	1.21	5.9
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-May-16	T	52.2	<0.50	<2.0	8.9	<0.50	3,150	0.064	298,000	<0.50	0.050	0.71	71	<0.30	127	882,000	4.61	8.2	<0.50	<2.0	7,790,000	<0.050	<5.0	2.40	1.51	4.1
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.3	<0.50	3,320	<0.050	301,000	<0.50	<0.050	1.47	<10	<0.30	127	916,000	3.21	8.1	<0.50	<2.0	8,060,000	<0.050	<5.0	2.63	1.29	4.6
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	18-Aug-16	T	23.8	<0.50	<2.0	8.9	<0.50	3,240	<0.050	290,000	<0.50	<0.050	0.67	36	<0.30	126	892,000	3.92	8.1	<0.50	<2.0	7,720,000	<0.050	<5.0	2.50	1.35	9.3
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	24-Nov-16	D	15.2	<0.50	<2.0	7.8	<0.50	3,040	<0.050	249,000	<0.50	<0.050	0.61	<10	<0.30	124	797,000	3.10	7.2	<0.50	<2.0	7,270,000	<0.050	<5.0	2.09	0.93	9.8
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	24-Nov-16	T	41.4	<0.50	<2.0	8.2	<0.50	3,040	0.061	256,000	<0.50	<0.050	0.94	56	<0.30	119	801,000	4.26	7.4	<0.50	<2.0	6,840,000	<0.050	<5.0	2.16	1.16	23.6
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Mar-17	D	10.3	<0.50	<2.0	12.2	<0.50	3,240	<0.050	312,000	<0.50	<0.050	0.57	<10	<0.30	119	972,000	2.34	7.7	<0.50	<2.0	7,980,000	<0.050	<5.0	2.44	1.09	3.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	14-Mar-17	T	46.6	<0.50	<2.0	9.0	<0.50	3,090	<0.050	307,000	<0.50	<0.050	0.51	47	<0.30	139	913,000	3.45	8.6	<0.50	<2.0	8,040,000	<0.050	<5.0	2.65	1.38	5.5
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Jun-17	D	5.7	<0.50	<2.0	10.5	<0.50	2,450	<0.050	216,000	<0.50	<0.050	0.56	<10	<0.30	104	675,000	4.82	6.8	<0.50	<2.0	5,990,000	<0.050	<5.0	2.00	0.82	<3.0
P3-3-O	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	9-Jun-17	T	56.9	<0.50	<2.0	11.0	<0.50	2,380	<0.050	218,000	<0.50	0.052	0.60	95	<0.30	102	680,000	7.62	6.4	<0.50	<2.0	5,770,000	<0.050	<5.0	2.06	1.10	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	D	11.1	<0.50	<2.0	10.5	<0.50	3,760	0.091	292,000	<0.10	<0.050	0.53	<10	<0.30	141	867,000	4.34	7.9	0.56	<2.0	7,210,000	<0.050	<5.0	2.40	1.20	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	21.4	<0.50	3,870	0.136	322,000	<0.50	0.061	0.90	<10	<0.30	144	938,000	7.14	6.6	<0.50	<2.0	8,230,000	<0.050	<5.0	1.98	1.01	4.8
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	T	22.7	<0.50	<2.0	19.2	<0.50	3,930	0.103	342,000	<0.50	0.060	0.75	36	<0.30	146	951,000	7.74	7.1	<0.50	<2.0	9,050,000	<0.050	<5.0	2.05	1.19	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	D	16.8	<0.50	<2.0	9.2	<0.50	3,060	0.090	234,000	<0.50	<0.050	0.73	<10	<0.30	124	807,000	5.32	7.0	<0.50	<2.0	5,900,000	<0.050	<5.0	1.81	1.11	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	T	41.7	<0.50	<2.0	8.9	<0.50	2,980	0.083	237,000	<0.50	<0.050	0.74	24	<0.30	122	781,000	5.51	7.1	<0.50	<2.0	5,880,000	<0.050	<5.0	1.83	1.17	3.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	D	18.8	<0.50	<2.0	8.0	<0.50	2,360	<0.050	210,000	<0.50	<0.050	0.78	<10	<0.30	96	661,000	3.24	5.9	<0.50	<2.0	5,880,000	<0.050	<5.0	1.58	0.83	4.3
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	T	39.2	<0.50	<2.0	7.9	<0.50	2,350	<0.050	214,000	<0.50	<0.050	1.04	46	<0.30	96	675,000	3.76	5.8	<0.50	<2.0	5,960,000	<0.050	<5.0	1.58	0.94	5.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.2	<0.50	3,720	<0.050	307,000	<0.50	0.226	0.57	12	<0.30	136	942,000	4.82	8.8	<0.50	<2.0	8,170,000	<0.050	<5.0	2.27	1.16	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	T	62.3	<0.50	<2.0	10.6	<0.50	3,910	<0.050	307,000	<0.50	<0.050	1.21 J	76	<0.30	146	927,000	5.11	9.1	<0.50	<2.0	8,150,000	<0.050	<5.0	2.40	1.37	3.8
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	D	5.8	<0.50	<2.0	9.3	<0.50	3,970	0.082	303,000	<0.50	0.086	0.76	<10	<0.30	142	852,000	3.49	8.9	<0.50	<2.0	7,660,000	<0.050	<5.0	2.22	1.35	4.8
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	T	21.6	<0.50	<2.0	8.6	<0.50	3,790	<0.050	292,000	<0.50	<0.050	0.57	25	<0.30	136	817,000	4.17	8.5	<0.50	<2.0	7,340,000	<0.050	<5.0	2.16	1.34	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	D	6.9	<0.50	<2.0	14.7	<0.50	2,810	0.056	222,000	<0.50	0.092	2.14	<10	<0.30	128	725,000	6.43	6.7	0.62	<2.0	5,820,000	<0.050	<5.0	1.84	1.13	4.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	T	78.9	<0.50	<5.0	19.9	<0.50	2,900	0.056	237,000	<0.50	0.058	1.43	90	<0.30	137	771,000	11.5	6.4	<0.50	<3.0	6,140,000	<0.050	<5.0	1.72	1.36	3.3
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	12.3	<0.50	3,720	<0.050	319,000	<0.50	0.143	0.90	<10	<0.30	136	974,000	3.30	8.7	0.67	<2.0	7,780,000	<0.050	<5.0	2.45	1.34	4.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	T	17.3	<0.50	<2.0	11.2	<0.50	3,570	<0.050	310,000	<0.50	<0.050	<0.50	19	<0.30	129	983,000	3.52	8.3	<0.50	<2.0	7,770,000	<0.050	<5.0	2.37	1.41	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	15.4	<0.50	3,220	<0.050	288,000	<0.50	<0.050	0.77	<10	<0.30	123	860,000	7.83	7.5	<0.50	<2.0	7,230,000	<0.050	<5.0	1.96	1.16	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Dec-13	T	33.9	<0.50	<2.0	9.7	<0.50	3,520	<0.050	307,000	<0.50	<0.050	0.66	51	<0.30	137	933,000	4.19	8.5	<0.50	<2.0	7,830,000	<0.050	<5.0	2.35	1.36	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	D	18.7	<0.50	<2.0	8.5	<0.50	2,930	<0.050	211,000	<0.50	0.074	0.79	<10	<0.30	109	668,000	5.29	7.0	<0.50	<2.0	5,670,000	<0.050	<5.0	1.72	1.05	4.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	T	42.6	<0.50	<2.0	8.3	<0.50	2,980	<0.050	212,000	<0.50	<0.050	0.61	33	<0.30	111	679,000	6.41	6.7	<0.50	<2.0	5,630,000	<0.050	<5.0	1.70	1.06	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	D	7.1	<0.50	<2.0	10.3	<0.50	3,440	<0.050	256,000	<0.50	0.101	0.85	12	<0.30	135	787,000	3.22	8.0	0.59	<2.0	6,960,000	<0.050	<5.0	2.02	1.15	3.2
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	T	23.5	<0.50	<2.0	10.6	<0.50	3,460	<0.050	248,000	<0.50	<0.050	0.70	37	<0.30	140	779,000	4.75	7.9	<0.50	<2.0	6,750,000	<0.050	<5.0	1.95	1.31	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.5	<0.50	3,930	<0.050	321,000	<0.50	<0.050	0.70	<10	<0.30	157	978,000	3.53	8.4	0.52	<2.0	8,650,000	<0.050	<5.0	2.47	1.33	3.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	T	24.4	<0.50	<2.0	9.9	<0.50	3,870	<0.050	326,000	<0.50	<0.050	<0.50	31	<0.30	154	984,000	4.33	8.1	<0.50	<2.0	8,780,000	<0.050	<5.0	2.53	1.41	3.9
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	D	18.8	<0.50	<2.0	11.3	<0.50	3,990	0.131	307,000	<0.50	<0.050	0.81	<10	<0.30	94	916,000	2.00	8.2	<0.50	<2.0	7,830,000	<0.050	<5.0	2.32	1.07	5.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	T	15.2	<0.50	<2.0	10.3	<0.50	4,070	0.078	313,000	<0.50	<0.050	<0.50	15	<0.30	101	945,000	2.44	8.4	<0.50	<2.0	7,990,000	<0.050	<5.0	2.38	1.19	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	10.2	<0.50	3,120	0.177	286,000	<0.50	<0.050	0.89	<10	<0.30	87	863,000	4.53	6.9	0.56	<2.0	7,230,000	<0.050	<5.0	1.92	1.10	5.8
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	T	28.8	<0.50	<2.0	9.3	<0.50	3,170	<0.050	285,000	<0.50	<0.050	<0.50	41	<0.30	88	828,000	5.39	7.1	<0.50	<2.0	7,150,000	<0.050	<5.0	1.93	1.23	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.9	<0.50	3,630	<0.050	312,000	<0.50	0.063	0.78	<10	<0.30	126	921,000	3.57	8.3	0.54	<2.0	8,300,000	<0.050	<5.0	2.24	1.21	4.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	T	15.9	<0.50	<2.0	10.0	<0.50	3,600	<0.050	321,000	<0.50	0.055	0.71	34	<0.30	129	946,000	4.24	8.4	<0.50	<2.0	8,480,000	<0.050	<5.0	2.30	1.29	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Dec-15	D	24.3	<0.50	<2.0	6.9	<0.50	2,480	0.084	200,000	<0.50	<0.050	0.84	<10	<0.30	90.0	611,000	2.94	4.7	<0.50	<2.0	5,010,000	<0.050	<5.0	1.33	0.81	5.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Dec-15	T	82.5	<0.50	<2.0	6.5	<0.50	2,400	0.080	199,000	<0.50	<0.050	0.60	77	<0.30	85	627,000	5.82	4.6	<0.50	<2.0	4,990,000	<0.050	<5.0	1.24	0.96	3.6
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	D	9.9	<0.50	<2.0	9.5	<0.50	3,290	<0.050	284,000	<0.50	<0.050	0.77	<10	<0.30	133	887,000	3.76	8.4	<0.50	<2.0	8,760,000	<0.050	<5.0	2.39	1.30	9.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	T	51.4	<0.50	<2.0	9.5	<0.50	3,570	<0.050	285,000	<0.50	<0.050	<0.50	46	<0.30	137	867,000	4.46	8.6	0.71	<2.0	8,640,000	<0.050	<5.0	2.53	1.37	3.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.7	<0.50	3,030	<0.050	259,000	<0.50	<0.050	0.92	<10	<0.30	122	845,000	2.67	7.8	<0.50	<2.0	7,430,000	<0.050	<5.0	2.34	1.11	8.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-May-16	T	32.3	<0.50	<2.0	8.8	<0.50	3,110	0.061	270,000	<0.50	0.051	0.86	47	<0.30	124	880,000	4.54	7.7	<0.50	<2.0	7,640,000	<0.050	<5.0	2.40	1.34	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.9	<0.50	3,390	0.081	305,000	<0.50	<0.050	0.69	<10	<0.30	133	914,000	2.46	7.8	<0.50	<2.0	8,020,000	<0.050	<5.0	2.42	1.02	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	T	21.8	<0.50	<2.0	10.6	<0.50	3,660	0.053	307,000	<0.50	<0.050	0.53	32	<0.30	149	929,000	4.13	8.5	0.52	<2.0	8,110,000	<0.050	<5.0	2.65	1.27	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	D	16.1	<0.50	<2.0	8.5	<0.50	3,110	0.073	249,000	<0.50	<0.050	0.72	<10	<0.30	114	802,000	3.00	7.2	<0.50	<2.0	7,180,000	<0.050	<5.0	2.08	1.01	6.3
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	T	42.7	<0.50	<2.0	7.9	<0.50	3,110	0.063	260,000	<0.50	<0.050	0.69	51	<0.30	125	807,000	4.13	7.3	<0.50	<2.0	7,170,000	<0.050	<5.0	2.11	1.12	3.9
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	D	13.4	<0.50	<2.0	11.4	<0.50	2,720	<0.050	257,000	<0.50	<0.050	0.58	<10	<0.30	118	816,000	3.18	7.7	<0.50	<2.0	6,790,000	<0.050	<5.0	2.30	1.12	3.4
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	T	50.2	<0.50	<2.0	8.7	<0.50	2,870	<0.050	263,000	<0.50	<0.050	0.64	44	<0.30	124	829,000	4.08	8.0	<0.50	<2.0	7,350,000	<0.050	<5.0	2.36	1.16	4.5
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Jun-17	D	6.3	<0.50	<2.0	10.6	<0.50	2,520	<0.050	208,000	<0.50	<0.050	0.97	<10	<0.30	103	643,000	4.43	6.7	<0.50	<2.0	5,830,000	<0.050	<5.0	1.93	0.86	<3.0
P3-3-NBO	Surface Water	P3-3	NA	WB	NBO	NBO	NBO	---	---	9-Jun-17	T	50.8	<0.50	<2.0	11.6	<0.50	2,450	<0.050	209,000	<0.50	<0.050	3.10	74	0.45	103	637,000	6.75	6.2	0.92	<2.0	5,420,000	<0.050	<5.0	1.95	0.91	4.6
P3-4-O	Surface Water	P3-4	NA	WB	SW	SW	SW	---	---	8-Dec-11	D	7.8 J	<0.50	<2.0	8.8	<0.50	3,380	0.070 J	294,000	<0.50	<0.050	0.55	<10	<0.30	134	884,000	2.87	7.7	<0.50	<2.0	7,570,000	<0.050	<5.0	2.19	1.31	<3.0
P3-4-O	Surface Water	P3-4	NA	WB	SW	SW	SW	---	---	8-Dec-11	T	25.6	<0.50	<2.0	9.2	<0.50	3,360	0.072 J	296,000	<0.50	<0.050	0.63	30	<0.30	135	898,000	3.99	7.9	<0.50	<2.0	7,640,000	<0.050	<5.0	2.02	1.40	<3.0
P3-4-NBO	Surface Water	P3-4	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	D	13.4 J	<0.50	<2.0	9.3	<0.50	3,230	0.150 J	309,000	<0.50	<0.050	<0.50	<10	<0.30	130	915,000	3.29	7.5	<2.0	<2.0	7,970,000	<0.050	<5.0	2.12	1.35	<3.0
P3-4-NBO	Surface Water	P3-4	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	T	26.5	<0.50	<2.0	9.7	<0.50	3,240	0.076 J	312,000	<0.50	<0.050	0.86	30	<0.30	131	934,000	4.09	7.4	<0.50	<2.0	8,090,000	<0.050	<5.0	2.12	1.39	3.3
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	8-Dec-11	D	10.0 J	<0.50	<2.0	8.5	<0.50	3,320	0.063 J	286,000	<0.50	<0.050	0.57	<10	<0.30	130	879,000	3.17	7.5	<0.50	<2.0	7,350,000	<0.050	<5.0	2.07	1.40	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	8-Dec-11	T	17.9	<0.50	<2.0	9.2	<0.50	3,220	0.063 J	287,000	<0.50	<0.050	0.77	14	<0.30	133	903,000	3.83	7.6	<0.50	<2.0	7,370,000	<0.050	<5.0	1.99	1.36	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	13-Mar-12	D	21.3	<0.50	<2.0	9.3	<0.50	3,870	0.103	306,000	<0.10	<0.050	<0.50	<10	<0.30	147	965,000	3.15	9.4	<0.50	<2.0	8,040,000	<0.050	<5.0	2.54	1.19	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	11-Jun-12	D	24.8	<0.50	<2.0	5.3	<0.50	2,530	0.093	189,000	<0.50	<0.050	1.11	11	<0.30	99	617,000	2.05	6.4	0.61	<2.0	4,630,000	<0.050	<5.0	1.74	1.00	5.2
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	11-Jun-12	T	30.6	<0.50	<2.0	6.1	<0.50	2,400	0.066	193,000	<0.50	<0.050	0.65	21	<0.30	91	637,000	2.36	5.6	<0.50	<2.0	4,810,000	<0.050	<5.0	1.65	0.93	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10.6	<0.50	3,790	0.097	306,000	<0.50	<0.050	1.18	<10	<0.30	145	918,000	4.02	8.5	<0.50	<2.0	8,210,000	<0.050	<5.0	2.41	1.28	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	18-Sep-12	T	44.2	<0.50	<2.0	10.1	<0.50	3,750	0.076	301,000	<0.50	<0.050	0.81	63	<0.30	142	900,000	4.96	8.3	<0.50	<2.0	8,110,000	<0.050	<5.0	2.34	1.42	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	13-Nov-12	D	17.5	<0.50	<2.0	8.5	<0.50	2,980	0.096	233,000	<0.50	<0.050	0.94	<10	<0.30	123	786,000	4.62	7.0	<0.50	<2.0	5,800,000	<0.050	<5.0	1.88	1.07	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	13-Nov-12	T	28.2	<0.50	<2.0	8.3	<0.50	3,020	0.081	238,000	<0.50	<0.050	0.76	19	<0.30	125	797,000	4.94	7.1	<0.50	<2.0	6,020,000	<0.050	<5.0	1.90	1.16	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Dec-12	D	23.4	<0.50	<2.0	7.9	<0.50	2,710	<0.050	196,000	<0.50	<0.050	0.55	<10	<0.30	92	627,000	3.52	6.4	<0.50	<2.0	5,480,000	<0.050	<5.0	1.70	0.95	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Dec-12	T	41.9	<0.50	<2.0	8.4	<0.50	2,880	<0.050	205,000	<0.50	<0.050	0.75	25	<0.30	97	648,000	4.00	6.6	<0.50	<2.0	5,710,000	<0.050	<5.0	1.76	1.00	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	8.1	<0.50	3,480	<0.050	309,000	<0.50	0.213	<0.50	<10	<0.30	124	930,000	3.11	8.1	<0.50	<2.0	8,230,000	<0.050	<5.0	2.10	1.09	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-Jan-13	T	25.8	<0.50	<2.0	6.7	<0.50	2,870	<0.050	309,000	<0.50	<0.050	0.62	38	<0.30	103	939,000	2.91	6.4	<0.50	<2.0	8,250,000	<0.050	<5.0	1.73	0.95	3.8
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	11-Mar-13	D	8.5	<0.50	<2.0	8.6	<0.50	3,520	<0.050	263,000	<0.50	<0.050	0.66	<10	<0.30	128	797,000	3.76	8.0	<0.50	<2.0	7,110,000	<0.050	<5.0	2.13	1.21	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	11-Mar-13	T	24.9	<0.50	<2.0	8.2	<0.50	3,400	<0.050	257,000	<0.50	<0.050	0.64	40	<0.30	126	781,000	4.31	7.9	<0.50	<2.0	6,910,000	<0.050	<5.0	2.10	1.18	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	24-Jun-13	D	6.7	<0.50	<3.0	10.1	<0.50	2,750	<0.050	219,000	<0.50	0.086	1.16	<10	<0.30	135	727,000	5.51	7.0	0.50	<3.0	5,700,000	<0.050	<5.0	1.92	1.12	3.1
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	24-Jun-13	T	750	<0.50	<3.0	13.7	<0.50	2,820	0.052	224,000	1.29	0.510	3.14	948	1.19	158	746,000	25.4	7.1	1.70	<3.0	5,810,000	<0.050	35.5	2.05	3.49	6.9
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	10.6	<0.50	3,450	<0.050	306,000	<0.50	0.119	0.76	<10	<0.30	125	959,000	2.88	8.0	0.59	<2.0	7,730,000	<0.050	<5.0	2.34	1.25	3.4
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	20-Sep-13	T	12.5	<0.50	<2.0	10.2	<0.50	3,440	<0.050	312,000	<0.50	<0.050	<0.50	17	<0.30	129	940,000	3.26	7.7	<0.50	<2.0	7,890,000	<0.050	<5.0	2.31	1.36	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	10.5	<0.50	3,640	<0.050	318,000	<0.50	0.066	0.68	<10	<0.30	138	978,000	3.28	12.1	<0.50	<2.0	8,920,000	<0.050	<5.0	2.72	1.43	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Dec-13	T	20.4	<0.50	<2.0	10.1	<0.50	3,550	<0.050	301,000	<0.50	<0.050	0.65	32	<0.30	138	905,000	3.98	12.1	<0.50	<2.0	8,360,000	<0.050	<5.0	2.68	1.49	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-14	D	20.9	<0.50	<2.0	8.0	<0.50	2,850	<0.050	213,000	<0.50	0.076	0.76	<10	<0.30	105	657,000	5.61	6.7	<0.50	<2.0	5,600,000	<0.050	<5.0	1.66	0.96	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-14	T	54.5	<0.50	<2.0	8.3	<0.50	2,840	<0.050	205,000	<0.50	<0.050	0.65	39	<0.30	106	644,000	6.82	6.6	<0.50	<2.0	5,390,000	<0.050	<5.0	1.65	1.28	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	13-Jun-14	D	5.7	<0.50	<2.0	10.1	<0.50	3,500	<0.050	247,000	<0.50	<0.050 UJ	0.54 J	<10	<0.30	138	777,000	3.28	7.7	<0.50	<2.0	6,780,000	<0.050	<5.0	2.01	1.25	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	13-Jun-14	T	24.5	<0.50	<2.0	10.7	<0.50	3,490	<0.050	246,000	<0.50	<0.050	0.82	38 J	<0.30	136	773,000	5.33	8.3	0.62 J	<2.0	6,740,000	<0.050	<5.0	2.03	1.35	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	11.0	<0.50	3,940	<0.050	313,000	<0.50	<0.050	0.75 J	<10	<0.30	159	942,000	3.40	8.4	0.54	<2.0	8,510,000	<0.050	<5.0	2.51	1.36	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	12-Sep-14	T	15.2	<0.50	<2.0	9.7	<0.50	3,800	<0.050	300,000	<0.50	<0.050	<0.50	28	<0.30	158	925,000	3.91	7.8	<0.50	<2.0	8,100,000	<0.050	<5.0	2.53	1.44	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Mar-15	D	<5.0	<0.50	<2.0	10.2	<0.50	3,980	<0.050	291,000	<0.50	<0.050	0.96	<10	<0.30	99	894,000	2.45	8.2	<0.50	<2.0	7,470,000	<0.050	<5.0	2.28	1.15	5.4
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	10-Mar-15	T	21.1	<0.50	<2.0	9.4	<0.50	4,130	<0.050	296,000	<0.50	<0.050	0.62	32	<0.30	102	928,000	2.99	8.5	<0.50	<2.0	7,720,000	<0.050	<5.0	2.28	1.24	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.8	<0.50	3,060	<0.050	266,000	<0.50	<0.050	0.74	<10	<0.30	88	870,000	3.88	7.1	<0.50	<2.0	7,190,000	<0.050	<5.0	1.92	1.08	7.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	17-Jun-15	T	22.4	<0.50	<2.0	8.3	<0.50	2,960	<0.050	283,000	<0.50	<0.050	0.60	31	<0.30	84	838,000	4.25	7.2	<0.50	<2.0	7,420,000	<0.050	<5.0	1.82	1.06	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.4	<0.50	3,500	<0.050	321,000	<0.50	<0.050	0.79	<10	<0.30	126	923,000	3.51	8.4	0.65	<2.0	8,280,000	<0.050	<5.0	2.29	1.12	8.5
DUP-1 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.0	<0.50	3,650	<0.050	320,000	<0.50	<0.050	<0.50	<10	<0.30	124	910,000	3.39	8.5	<0.50	<2.0	8,150,000	<0.050	<5.0	2.22	1.16	<3.0
QA/QC RPD										Duplicates	D	---	---	---	6%	---	4%	---	0%	---	---	---	---	---	2%	1%	3%	1%	---	---	2%	---	---	3%	4%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Sep-15	T	18.6	<0.50	<2.0	9.4	<0.50	3,730	<0.050	324,000	<0.50	0.059	0.52	27	<0.30	130	936,000	4.35	8.4	<0.50	<2.0	8,310,000	<0.050	<5.0	2.29	1.33	<3.0
DUP-1 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	14-Sep-15	T	13.1	<0.50	<2.0	9.9	<0.50	3,800	0.052	324,000	<0.50	<0.050	0.59	24	<0.30	127	939,000	4.27	9.4	<0.50	<2.0	8,320,000	<0.050	<5.0	2.41	1.31	<3.0
QA/QC RPD										Duplicates	T	---	---	---	5%	---	2%	---	0%	---	---	---	---	---	2%	0%	2%	11%	---	---	0%	---	---	5%	2%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Dec-15	D	22.3	<0.50	<2.0	6.8	<0.50	2,570	0.077	212,000	<0.50	<0.050	0.57	<10	<0.30	100	687,000	2.88	5.4	<0.50	<2.0	5,380,000	<0.050	<5.0	1.45	0.91	4.5
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Dec-15	T	55.2	<0.50	<2.0	6.6	<0.50	2,660	<0.050	224,000	0.68	<0.050	<0.50	49	<0.30	102	720,000	3.75	5.0	<0.50	<2.0	5,690,000	<0.050	<5.0	1.45	1.00	4.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	26-Feb-16	D	21.0	<0.50	<2.0	8.9	<0.50	2,830	<0.050	229,000	<0.50	<0.050	0.76	<10	<0.30	113	736,000	3.93	7.0	<0.50	<2.0	6,310,000	<0.050	<5.0	1.95	1.03	5.2
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	26-Feb-16	T	37.2	<0.50	<2.0	8.5	<0.50	2,760	<0.050	232,000	<0.50	<0.050	0.79	23	<0.30	117	736,000	4.23	7.2	<0.50	<2.0	6,410,000	<0.050	<5.0	1.99	1.06	3.1
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.4	<0.50	3,010	<0.050	262,000	<0.50	<0.050	0.64	<10	<0.30	121	860,000	2.79	7.9	<0.50	<2.0	7,430,000	<0.050	<5.0	2.32	1.16	<3.0
DUP-1 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.2	<0.50	3,040	<0.050	259,000	<0.50	<0.050	0.76	<10	<0.30	118	853,000	2.85	7.7	<0.50	<2.0	7,360,000	<0.050	<5.0	2.28	1.18	4.6
QA/QC RPD										Duplicates	D	---	---	---	2%	---	1%	---	1%	---	---	---	---	---	3%	1%	2%	3%	---	---	1%	---	---	2%	2%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-May-16	T	121	<0.50	<2.0	8.9	<0.50	3,110	0.065	270,000	<0.50	0.096	1.09	166	<0.30	126	868,000	6.64	7.9	0.53	<2.0	7,680,000	<0.050	5.8	2.40	1.70	19.4
DUP-1 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	9-May-16	T	119	<0.50	<2.0	8.7	<0.50	2,950	0.067	249,000	<0.50	0.142	0.94	163	<0.30	118	813,000	7.87	7.4	<0.50	<2.0	7,070,000	<0.050	6.0	2.27	1.56	16.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
QA/QC RPD										Duplicates	T	2%	---	---	2%	---	5%	3%	8%	---	---	---	2%	---	7%	7%	17%	7%	---	---	8%	---	3%	6%	9%	16%
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.2	<0.50	3,170	<0.050	265,000	<0.50	<0.050	0.60	<10	<0.30	130	871,000	3.06	7.6	<0.50	<2.0	7,630,000	<0.050	<5.0	2.42	1.24	3.3
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	18-Aug-16	T	11.9	<0.50	<2.0	8.6	<0.50	3,080	<0.050	256,000	<0.50	<0.050	0.58	18	<0.30	123	826,000	3.52	7.6	<0.50	<2.0	7,330,000	<0.050	<5.0	2.50	1.33	<3.0
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	24-Nov-16	D	14.6	<0.50	<2.0	8.2	<0.50	3,010	0.078	254,000	<0.50	<0.050	0.69	<10	<0.30	122	813,000	3.50	7.5	<0.50	<2.0	7,450,000	<0.050	<5.0	2.10	1.03	5.0
DUP-3 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	24-Nov-16	D	15.5	<0.50	<2.0	7.8	<0.50	3,150	0.102	259,000	<0.50	<0.050	<0.50	<10	<0.30	131	830,000	3.55	7.3	<0.50	<2.0	7,570,000	<0.050	<5.0	2.13	1.19	4.6
QA/QC RPD										Duplicates	D	6%	---	---	5%	---	5%	27%	2%	---	---	---	---	---	7%	2%	1%	3%	---	---	2%	---	---	1%	14%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	24-Nov-16	T	37.5	<0.50	<2.0	8.5	<0.50	3,270	<0.050	265,000	<0.50	<0.050	0.64	43	<0.30	131	821,000	4.19	7.6	<0.50	<2.0	7,040,000	<0.050	<5.0	2.21	1.03	47.8
DUP-3 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	24-Nov-16	T	48.7	<0.50	<2.0	8.3	<0.50	3,210	0.061	260,000	0.78	0.089	0.70	53	<0.30	137	812,000	4.54	8.7	0.60	<2.0	7,000,000	<0.050	<5.0	2.18	1.55	52.5
QA/QC RPD										Duplicates	T	26%	---	---	2%	---	2%	---	2%	---	---	---	---	---	4%	1%	8%	13%	---	---	1%	---	---	1%	40%	9%
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-17	D	13.9	<0.50	<2.0	12.8	<0.50	2,640	<0.050	251,000	<0.50	<0.050	0.55	<10	<0.30	114	812,000	2.89	7.2	<0.50	<2.0	6,450,000	<0.050	<5.0	2.14	1.06	4.0
DUP-3 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-17	D	16.0	<0.50	<2.0	8.4	<0.50	2,780	<0.050	246,000	<0.50	<0.050	<0.50	<10	<0.30	120	789,000	3.04	7.7	<0.50	<2.0	6,300,000	<0.050	<5.0	2.25	1.16	3.6
QA/QC RPD										Duplicates	D	14%	---	---	42%	---	5%	---	2%	---	---	---	---	---	5%	3%	5%	7%	---	---	2%	---	---	5%	9%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-17	T	38.5	<0.50	<2.0	8.1	<0.50	2,750	<0.050	252,000	<0.50	<0.050	0.60	36	<0.30	120	802,000	4.03	7.6	<0.50	<2.0	7,010,000	<0.050	<5.0	2.23	1.10	10.2
DUP-3 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	14-Mar-17	T	39.7	<0.50	<2.0	8.3	<0.50	2,750	<0.050	249,000	<0.50	<0.050	<0.50	39	<0.30	120	805,000	4.01	7.6	<0.50	<2.0	7,000,000	<0.050	<5.0	2.21	1.10	10.4
QA/QC RPD										Duplicates	T	3%	---	---	2%	---	0%	---	1%	---	---	---	---	---	0%	0%	0%	0%	---	---	0%	---	---	1%	0%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-Jun-17	D	6.8	<0.50	<2.0	10.6	<0.50	2,450	<0.050	218,000	<0.50	<0.050	0.96	<10	<0.30	102	660,000	4.77	6.5	<0.50	<2.0	6,060,000	<0.050	<5.0	1.98	0.87	<3.0
DUP-8 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	9-Jun-17	D	6.5	<0.50	<2.0	9.7	<0.50	2,340	<0.050	210,000	<0.50	<0.050	0.51	<10	<0.30	96	653,000	4.38	5.9	<0.50	<2.0	5,820,000	<0.050	<5.0	1.88	0.83	<3.0
QA/QC RPD										Duplicates	D	5%	---	---	9%	---	5%	---	4%	---	---	---	---	---	6%	1%	9%	10%	---	---	4%	---	---	5%	5%	---
P3-12-O	Surface Water	P3-12	NA	WB	SW	SW	SW	---	---	9-Jun-17	T	55.6	<0.50	<2.0	11.6	<0.50	2,430	<0.050	200,000	<0.50	0.050	0.70	80	1.03	98	628,000	7.61	6.5	<0.50	<2.0	5,200,000	<0.050	<5.0	1.93	0.98	3.1
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	D	9.7 J	<0.50	<2.0	9.0	<0.50	3,230	0.070 J	300,000	<0.50	<0.050	0.86	<10	<0.30	131	875,000	3.00	7.6	<0.50	<2.0	7,650,000	<0.050	<5.0	2.13	1.31	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	8-Dec-11	T	39.2	<0.50	<2.0	8.9	<0.50	3,200	0.066 J	295,000	<0.50	<0.050	0.77	43	<0.30	129	875,000	4.50	7.5	<0.50	<2.0	7,560,000	<0.050	<5.0	2.02	1.37	3.4
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	13-Mar-12	D	12.9	<0.50	<2.0	9.7	<0.50	3,770	0.145	299,000	<0.10	<0.050	1.48	<10	<0.30	143	886,000	3.31	8.0	<0.50	<2.0	7,740,000	<0.050	<5.0	2.38	1.31	3.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	11-Jun-12	D	24.6	<0.50	<2.0	5.2	<0.50	2,140	<0.050	177,000	<0.50	<0.050	1.3	<10	<0.30	84	587,000	1.67	5.2	<0.50	<2.0	4,580,000	<0.050	<5.0	1.45	0.81	3.9
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	11-Jun-12	T	66.1	<0.50	<2.0	5.9	<0.50	2,260	0.125	185,000	<0.50	<0.050	0.75	64	<0.30	89	620,000	6.14	5.3	<0.50	<2.0	4,870,000	<0.050	<5.0	1.48	0.94	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10	<0.50	3,800	0.089	312,000	<0.50	<0.050	1.14	<10	<0.30	144	954,000	4.22	8.4	<0.50	<2.0	8,320,000	<0.050	<5.0	2.36	1.32	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	18-Sep-12	T	221	<0.50	<2.0	10.8	<0.50	3,860	0.088	323,000	0.63	0.196	1.92	353	0.62	145	929,000	10.90	8.3	0.8	<2.0	8,500,000	<0.050	9.7	2.39	1.86	4.1
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	D	19.4	<0.50	<2.0	8.6	<0.50	3,350	0.099	258,000	<0.50	<0.050	0.71	<10	<0.30	136	855,000	3.97	8.0	<0.50	<2.0	6,470,000	<0.050	<5.0	2.05	1.18	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	13-Nov-12	T	28.2	<0.50	<2.0	8.3	<0.50	3,300	0.099	261,000	<0.50	<0.050	0.78	27	<0.30	133	861,000	4.54	7.6	<0.50	<2.0	7,010,000	<0.050	<5.0	2.01	1.27	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	D	20.9	<0.50	<2.0	6.8	<0.50	1,990	<0.050	194,000	<0.50	<0.050	0.79	<10	<0.30	80	611,000	3.23	4.9	<0.50	<2.0	5,390,000	<0.050	<5.0	1.34	0.73	3.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-12	T	65	<0.50	<2.0	7.3	<0.50	2,030	<0.050	201,000	<0.50	<0.050	1.04	68	<0.30	81	622,000	4.30	5.2	<0.50	<2.0	5,590,000	<0.050	<5.0	1.42	1	4.2
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.2	<0.50	3,470	<0.050	292,000	<0.50	0.215 J	0.55	<10	<0.30	128	883,000	3.97 J	8.3	<0.50	<2.0	7,840,000	<0.050	<5.0	2.08	1.05	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	T	1,050	<0.50	<2.0	12.0	<0.50	2,980	<0.050	285,000	1.67	0.506	4.43	1,320	1.50 J	110	854,000	27.4	6.9	1.53	<2.0	7,600,000	<0.050	57.3	1.93	4.08	9.0 J
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	D	9.1	<0.50	<2.0	8.7	<0.50	3,610	0.067	256,000	<0.50	0.128	1.06	<10	<0.30	130	772,000	3.72	8.2	0.57	<2.0	6,900,000	<0.050	<5.0	2.07	1.24	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	11-Mar-13	T	23.8	<0.50	<2.0	8.1	<0.50	3,520	<0.050	257,000	<0.50	<0.050	0.51 J	30	<0.30	126	772,000	4.34	7.7	<0.50	<2.0	6,930,000	<0.050	<5.0	2.01	1.22	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	D	5.1 J	<0.50	<3.0	9.4	<0.50	2,780	<0.050	220,000	<0.50	<0.050 UJ	0.66 J	<10	<0.30	143	746,000	8.87	7.0	<0.50	<6.0	6,120,000	<0.050	<5.0	1.95	1.09	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	T	1,090	<0.50	<3.0	14.0	<0.50	2,820	<0.050 UJ	218,000	1.98	0.612	4.63	1,450	1.79	138	725,000	30.7	6.9	2.50	<3.0	5,950,000	<0.050	51.5	1.93	4.05	6.8 J
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	10.9	<0.50	3,540	<0.050	309,000	<0.50	0.191	0.81	<10	<0.30	128	949,000	3.18	8.2	0.55	<2.0	7,590,000	<0.050	<5.0	2.50	1.31	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	20-Sep-13	T	13.8	<0.50	<2.0	10.4	<0.50	3,610	<0.050	313,000	<0.50	<0.050	<0.50	14	<0.30	134	995,000	3.18	8.5	<0.50	<2.0	7,870,000	<0.050	<5.0	2.29	1.33	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	10.2	<0.50	3,550	<0.050	312,000	<0.50	0.057	0.65	<10	<0.30	135	958,000	3.13	11.7	<0.50	<2.0	8,960,000	<0.050	<5.0	2.65	1.44	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	T	56.6	<0.50	<2.0	11.0	<0.50	3,740	<0.050	310,000	<0.50	0.055	0.97	87	<0.30	144	967,000	5.32	12.4	<0.50	<2.0	8,700,000	<0.050	<5.0	2.78	1.53	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	D	18.3	<0.50	<2.0	8.4	<0.50	3,080	<0.050	220,000	<0.50	0.074	0.78	<10	<0.30	115	688,000	5.35	7.4	<0.50	<2.0	5,820,000	<0.050	<5.0	1.83	1.07	3.5
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Mar-14	T	48.9	<0.50	<2.0	8.1	<0.50	3,000	<0.050	217,000	<0.50	<0.050	0.55	33	<0.30	113	680,000	6.54	7.2	<0.50	<2.0	5,780,000	<0.050	<5.0	1.74	1.08	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	D	6.7	<0.50	<2.0	10.8	<0.50	3,510	<0.050	246,000	<0.50	0.082	0.96	13	<0.30	136	776,000	3.41	8.1	<0.50	<2.0	6,720,000	<0.050	<5.0	2.04	1.21	3.3
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	13-Jun-14	T	122	<0.50	<2.0	11.0	<0.50	3,470	<0.050	254,000	<0.50	0.152	1.48	175	0.42	137	781,000	13.5	7.7	0.62	<2.0	6,900,000	<0.050	<5.0	1.99	1.68	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.7	<0.50	3,880	<0.050	314,000	<0.50	<0.050	0.73	<10	<0.30	151	933,000	3.65	8.5	<0.50	<2.0	8,440,000	<0.050	<5.0	2.49	1.39	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	12-Sep-14	T	19.4	<0.50	<2.0	10.0	<0.50	3,860	<0.050	326,000	<0.50	<0.050	<0.50	29	<0.30	155	965,000	4.12	8.3	<0.50	<2.0	8,730,000	<0.050	<5.0	2.47	1.46	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	D	6.0	<0.50	<2.0	10.8	<0.50	4,080	0.122	313,000	<0.50	<0.050	1.06	<10	<0.30	96	943,000	2.42	8.5	0.64	<2.0	8,130,000	<0.050	<5.0	2.31	1.10	8.7
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Mar-15	T	18.7	<0.50	<2.0	9.7	<0.50	4,110	0.098	305,000	<0.50	<0.050	0.73	32	<0.30	100	915,000	2.99	8.6	<0.50	<2.0	7,860,000	<0.050	<5.0	2.26	1.21	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.9	<0.50	3,240	<0.050	300,000	<0.50	<0.050	0.65	<10	<0.30	94	883,000	4.22	7.1	<0.50	<2.0	7,460,000	<0.050	<5.0	2.01	1.16	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	17-Jun-15	T	227	<0.50	<2.0	9.6	<0.50	3,270	<0.050	296,000	<0.50	0.137	1.56	305	<0.30	91	863,000	9.66	7.2	0.65	<2.0	7,290,000	<0.050	12.8	1.98	1.75	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.2	<0.50	3,370	<0.050	300,000	<0.50	0.064	0.89	<10	<0.30	121	893,000	2.95	8.4	<0.50	<2.0	7,780,000	<0.050	<5.0	2.24	1.25	7.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Sep-15	T	19.9	<0.50	<2.0	9.8	<0.50	3,460	<0.050	303,000	<0.50	0.058	0.82	35	<0.30	118	891,000	4.09	8.2	<0.50	<2.0	7,880,000	<0.050	<5.0	2.29	1.28	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-15	D	36.6	<0.50	<2.0	6.9	<0.50	2,070	<0.050	155,000	<0.50	<0.050	0.55	<10	<0.30	77	472,000	3.06	4.2	<0.50	<2.0	3,980,000	<0.050	<5.0	1.18	0.76	24.7
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-15	T	122	<0.50	<2.0	8.7	<0.50	2,320	<0.050	159,000	<0.50	0.058	0.51	118	<0.30	92	501,000	6.06	4.4	<0.50	<2.0	4,050,000	<0.050	5.6	1.18	1.00	6.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	D	17.7	<0.50	<2.0	9.3	<0.50	2,890	<0.050	238,000	<0.50	0.119	1.80	<10	<0.30	112	772,000	3.84	7.4	0.69	<2.0	7,560,000	<0.050	<5.0	1.96	1.08	6.6
DUP-1 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	D	16.6	<0.50	<2.0	9.0	<0.50	3,130	<0.050	237,000	<0.50	<0.050	<0.50	<10	<0.30	125	761,000	4.34	7.9	<0.50	<2.0	7,490,000	<0.050	<5.0	1.94	1.18	<3.0
QA/QC RPD										Duplicates	D	6%	---	---	3%	---	8%	---	0%	---	---	---	---	---	11%	1%	12%	7%	---	---	1%	---	---	1%	9%	---
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	T	67.6	<0.50	<2.0	8.5	<0.50	3,110	<0.050	246,000	<0.50	0.077	0.52	60.0	<0.30	117	793,000	4.97	7.6	<0.50	<2.0	7,830,000	<0.050	<5.0	2.04	1.25	5.6
DUP-1 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	26-Feb-16	T	57.1	<0.50	<2.0	9.2	<0.50	3,120	<0.050	240,000	<0.50	<0.050	<0.50	48	<0.30	125	778,000	4.73	7.4	<0.50	<2.0	7,620,000	<0.050	<5.0	2.08	1.21	3.1
QA/QC RPD										Duplicates	T	17%	---	---	8%	---	0%	---	2%	---	---	---	---	---	7%	2%	5%	3%	---	---	3%	---	---	2%	3%	---
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.5	<0.50	3,100	0.079	268,000	<0.50	<0.050	0.76	<10	<0.30	121	867,000	3.27	8.2	<0.50	<2.0	7,580,000	<0.050	<5.0	2.35	1.22	5.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-May-16	T	235	<0.50	<2.0	9.1	<0.50	3,070	0.078	269,000	<0.50	0.157	1.45	345	0.37	122	876,000	9.89	7.5	0.64	<2.0	7,610,000	<0.050	12.3	2.42	1.98	4.4
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.9	<0.50	3,510	0.057	269,000	<0.50	<0.050	0.67	<10	<0.30	131	878,000	2.90	8.2	<0.50	<2.0	7,580,000	<0.050	<5.0	2.47	1.23	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	18-Aug-16	T	25.9	<0.50	<2.0	9.1	<0.50	3,410	0.064	293,000	0.81	<0.050	0.60	32	<0.30	136	895,000	5.82	8.0	<0.50	<2.0	7,770,000	<0.050	<5.0	2.45	1.33	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	D	14.2	<0.50	<2.0	8.0	<0.50	3,100	0.075	252,000	<0.50	<0.050	0.64	<10	<0.30	113	810,000	3.37	7.1	<0.50	<2.0	7,380,000	<0.050	<5.0	1.97	1.01	<3.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Nov-16	T	115	<0.50	<2.0	8.1	<0.50	3,110	0.069	256,000	<0.50	0.086	0.90	146	<0.30	128	809,000	6.95	7.3	0.53	<2.0	6,980,000	<0.050	5.1	2.08	1.39	3.8
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	D	22.0	<0.50	<2.0	12.4	<0.50	2,740	<0.050	247,000	<0.50	<0.050	0.54	<10	<0.30	119	800,000	3.04	7.6	<0.50	<2.0	6,380,000	<0.050	<5.0	2.26	1.08	4.0
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	14-Mar-17	T	57.9	<0.50	<2.0	8.5	<0.50	2,680	<0.050	240,000	<0.50	<0.050	0.69	63	<0.30	117	768,000	4.47	7.3	<0.50	<2.0	6,380,000	<0.050	<5.0	2.17	1.15	5.6
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	8-Jun-17	D	12.9	<0.50	<2.0	9.4	<0.50	1,540	<0.050	201,000	<0.50	<0.050	1.13	<10	<0.30	110	658,000	3.62	6.1	<0.50	<2.0	5,280,000	<0.050	<5.0	1.72	0.96	4.5
P3-12-NBO	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	8-Jun-17	T	272	<0.50	<2.0	10.8	<0.50	2,490	0.069	211,000	0.80	0.143	1.47	295	0.73	99	676,000	12.4	6.1	0.79	<2.0	5,730,000	<0.050	10.7	1.93	1.57	7.1
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	13-Mar-12	D	10.9	<0.50	<2.0	11.3	<0.50	3,840	0.076	322,000	<0.10	<0.050	<0.50	<10	<0.30	144	948,000	16.8	9.3	<0.50	<2.0	8,260,000	<0.050	<5.0	2.55	1.19	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	6-Jun-12	D	10.7	<0.50	<2.0	8.1	<0.50	3,070	0.088	251,000	<0.50	<0.050	0.89	<10	<0.30	121	822,000	2.21	7.4	<0.50	<2.0	7,340,000	<0.050	<5.0	2.12	1.15	3.2
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	18-Sep-12	D	50.1	<0.50	<2.0	9.9	<0.50	4,040	0.1	325,000	<0.50	0.05	0.78	73	<0.30	153	987,000	5.75	9	<0.50	<2.0	8,850,000	<0.050	<5.0	2.55	1.54	3.4
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	18-Sep-12	T	42.4	<0.50	<2.0	9.7	<0.50	3,940	0.074	321,000	<0.50	<0.050	0.68	76	<0.30	153	988,000	5.46	8.8	0.52	<2.0	8,850,000	<0.050	<5.0	2.53	1.47	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	10-Dec-12	---													Well Not Sampled												
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.2	<0.50	3,710	<0.050	306,000	<0.50	0.199	<0.50	26	<0.30	134	911,000	6.99	8.7	<0.50	<2.0	8,040,000	<0.050	<5.0	2.24	1.16	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-Jan-13	T	31.1	<0.50	<2.0	8.8	<0.50	3,540	<0.050	297,000	<0.50	<0.050	0.65	41	<0.30	125	906,000	6.60	8.1	<0.50	<2.0	7,810,000	<0.050	<5.0	2.15	1.14	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	11-Mar-13	D	9.0	<0.50	<2.0	9.1	<0.50	3,550	<0.050	254,000	<0.50	<0.050	0.80	<10	<0.30	126	780,000	4.99	7.6	<0.50	<2.0	6,930,000	<0.050	<5.0	2.01	1.12	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	11-Mar-13	T	35.0	<0.50	<2.0	9.1	<0.50	3,550	<0.050	253,000	<0.50	<0.050	0.66	41	<0.30	124	780,000	6.02	7.7	<0.50	<2.0	6,960,000	<0.050	<5.0	1.99	1.29	3.1
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	24-Jun-13	D	8.4	<0.50	<2.0	8.8	<0.50	2,490	<0.050	218,000	<0.50	0.077	0.96	<10	<0.30	110	726,000	2.72	6.6	<0.50	<2.0	5,210,000	<0.050	<5.0	1.77	1.05	3.6
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	24-Jun-13	T	257	<0.50	<2.0	9.3	<0.50	2,800	<0.050	229,000	<0.50	0.052	0.77	25	<0.30	136	755,000	4.73	7.4	0.67	<2.0	5,430,000	<0.050	<5.0	1.93	1.29	5.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.2	<0.50	3,740	<0.050	319,000	<0.50	0.128	0.80	<10	<0.30	134	1,010,000	3.24	8.6	0.56	<2.0	8,140,000	<0.050	<5.0	2.44	1.44	4.3
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	20-Sep-13	T	14.2	<0.50	<2.0	10.4	<0.50	3,620	<0.050	329,000	<0.50	<0.050	<0.50	22	<0.30	135	1,030,000	3.16	8.8	<0.50	<2.0	8,580,000	<0.050	<5.0	2.37	1.34	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Mar-14	D	21.8	<0.50	<2.0	7.8	<0.50	2,780	<0.050	198,000	<0.50	0.078	0.66	<10	<0.30	106	631,000	5.61	6.6	<0.50	<2.0	5,280,000	<0.050	<5.0	1.66	0.91	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Mar-14	T	37.5	<0.50	<2.0	8.1	<0.50	2,880	<0.050	204,000	<0.50	<0.050	0.55	24	<0.30	108	642,000	6.14	6.9	<0.50	<2.0	5,430,000	<0.050	<5.0	1.66	0.94	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	13-Jun-14	D	6.9	<0.50	<2.0	10.3	<0.50	3,410	<0.050	244,000	<0.50	0.102	0.69	<10	<0.30	131	785,000	2.89	7.6	0.65	<2.0	6,470,000	<0.050	<5.0	1.99	1.21	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	13-Jun-14	T	23.8	<0.50	<2.0	10.6	<0.50	3,300	<0.050	249,000	<0.50	0.050	0.71	26	<0.30	132	754,000	4.65	7.7	<0.50	<2.0	6,820,000	<0.050	<5.0	1.99	1.30	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.4	<0.50	3,990	<0.050	313,000	<0.50	<0.050	0.77	<10	<0.30	155	953,000	3.39	8.4	<0.50	<2.0	8,550,000	<0.050	<5.0	2.47	1.29	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	12-Sep-14	T	18.9	<0.50	<2.0	9.6	<0.50	3,920	<0.050	306,000	<0.50	<0.050	<0.50	33	<0.30	158	931,000	4.22	8.0	<0.50	<2.0	8,280,000	<0.050	<5.0	2.48	1.40	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	10-Mar-15	D	10.1	<0.50	<2.0	10.5	<0.50	3,960	0.056	295,000	<0.50	<0.050	0.85	<10	<0.30	98	899,000	2.36	8.1	<0.50	<2.0	7,550,000	<0.050	<5.0	2.29	1.25	6.1
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	10-Mar-15	T	29.1	<0.50	<2.0	9.7	<0.50	4,140	0.070	305,000	<0.50	<0.050	0.64	28	<0.30	99	936,000	2.95	8.4	<0.50	<2.0	7,880,000	<0.050	<5.0	2.27	1.19	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.3	<0.50	3,210	<0.050	302,000	<0.50	<0.050	0.57	<10	<0.30	92	910,000	3.64	7.3	<0.50	<2.0	8,080,000	<0.050	<5.0	1.95	1.18	3.3
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	17-Jun-15	T	21.6	<0.50	<2.0	8.3	<0.50	3,250	0.070	296,000	<0.50	<0.050	<0.50	29	<0.30	92	905,000	4.01	7.5	<0.50	<2.0	7,890,000	<0.050	<5.0	1.96	1.17	4.3
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.3	<0.50	3,500	<0.050	267,000	<0.50	<0.050	0.62	<10	<0.30	128	969,000	3.67	8.4	<0.50	<2.0	8,090,000	<0.050	<5.0	2.37	1.27	3.6
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Sep-15	T	16.8	<0.50	<2.0	9.6	<0.50	3,670	<0.050	269,000	<0.50	0.058	0.51	30.0	<0.30	128	998,000	4.15	8.4	<0.50	<2.0	8,210,000	<0.050	<5.0	2.41	1.28	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Dec-15	D	22.9	<0.50	<2.0	6.8	<0.50	2,620	0.069	214,000	<0.50	<0.050	0.63	<10	<0.30	96	687,000	4.06	5.0	<0.50	<2.0	5,350,000	<0.050	<5.0	1.42	0.88	7.1
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Dec-15	T	72.0	<0.50	<2.0	7.5	<0.50	2,720	0.076	222,000	<0.50	<0.050	0.69	66	<0.30	106	716,000	5.30	5.7	<0.50	<2.0	5,580,000	<0.050	<5.0	1.54	1.21	5.8
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	26-Feb-16	D	22.5	<0.50	<2.0	9.6	<0.50	3,330	<0.050	293,000	<0.50	<0.050	0.74	<10	<0.30	131	906,000	3.42	8.3	0.75	<2.0	8,820,000	<0.050	<5.0	2.31	1.31	18.4
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	26-Feb-16	T	46.2	<0.50	<2.0	9.5	<0.50	3,480	<0.050	304,000	<0.50	0.053	0.59	40.0	<0.30	142	943,000	4.12	9.0	0.75	<2.0	9,170,000	<0.050	<5.0	2.43	1.34	5.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.1	<0.50	3,110	0.070	263,000	<0.50	<0.050	0.78	<10	<0.30	121	855,000	2.99	7.7	<0.50	<2.0	7,470,000	<0.050	<5.0	2.31	1.21	7.5
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-May-16	T	193	<0.50	<2.0	9.4	<0.50	3,080	0.066	262,000	<0.50	0.118	1.31	261	<0.30	128	846,000	8.64	7.7	0.65	<2.0	7,420,000	<0.050	9.6	2.43	1.79	4.2
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.6	<0.50	3,230	<0.050	298,000	<0.50	<0.050	0.58	<10	<0.30	129	917,000	3.09	7.7	<0.50	<2.0	7,990,000	<0.050	<5.0	2.35	1.28	3.3
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	18-Aug-16	T	12.6	<0.50	<2.0	9.5	<0.50	3,480	<0.050	299,000	<0.50	<0.050	0.56	26	<0.30	132	894,000	3.51	8.4	<0.50	<2.0	8,010,000	<0.050	<5.0	2.67	1.15	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	24-Nov-16	D	15.7	<0.50	<2.0	8.6	<0.50	3,080	0.057	249,000	<0.50	<0.050	0.76	<10	<0.30	124	807,000	3.20	7.2	<0.50	<2.0	7,350,000	<0.050	<5.0	2.03	0.99	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	24-Nov-16	T	35.1	<0.50	<2.0	8.0	<0.50	3,140	0.070	263,000	<0.50	<0.050	0.62	42	<0.30	118	826,000	3.79	7.7	<0.50	<2.0	7,100,000	<0.050	<5.0	2.16	1.05	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Mar-17	D	10.4	<0.50	<2.0	12.4	<0.50	2,920	<0.050	280,000	<0.50	<0.050	1.05	<10	<0.30	125	876,000	3.12	7.9	<0.50	<2.0	7,250,000	<0.050	<5.0	2.38	1.12	4.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	14-Mar-17	T	46.2	<0.50	<2.0	9.0	<0.50	2,960	<0.050	265,000	<0.50	<0.050	0.53	47	<0.30	127	838,000	4.55	7.9	<0.50	<2.0	7,420,000	<0.050	<5.0	2.39	1.19	5.8
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-Jun-17	D	5.7	<0.50	<2.0	10.3	<0.50	2,740	<0.050	232,000	<0.50	<0.050	1.04	<10	<0.30	113	712,000	4.30	7.6	<0.50	<2.0	6,500,000	<0.050	<5.0	2.17	0.86	<3.0
P6-3-O	Surface Water	P6-3	NA	EB	SW	SW	SW	---	---	9-Jun-17	T	45.6	<0.50	<2.0	10.2	<0.50	2,490	<0.050	226,000	<0.50	0.051	0.68	68	<0.30	107	690,000	6.48	6.9	<0.50	<2.0	5,950,000	<0.050	<5.0	2.08	0.95	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	D	9.7	<0.50	<2.0	10.9	<0.50	3,930	0.105	319,000	<0.10	<0.050	0.51	<10	<0.30	149	938,000	48.5	8.6	<0.50	<2.0	8,090,000	<0.050	<5.0	2.49	1.00	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10.2	<0.50	4,080	0.118	319,000	<0.50	<0.050	1.02	<10	<0.30	156	959,000	5.22	9.5	0.6	<2.0	8,320,000	<0.050	<5.0	2.65	1.46	3.6
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	---													Well Not Sampled												
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	T	80.3	<0.50	<2.0	10	<0.50	3,940	0.095	341,000	<0.50	0.072	0.84	126	<0.30	150	1,000,000	7.30	9.6	<0.50	<2.0	9,170,000	<0.050	5.1	2.57	1.72	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.5	<0.50	3,920	<0.050	303,000	<0.50	0.154	0.55	14	<0.30	138	912,000	4.31	8.9	<0.50	<2.0	7,820,000	<0.050	<5.0	2.32	1.29	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	T	55.0	<0.50	<2.0	8.7	<0.50	3,530	<0.050	305,000	<0.50	<0.050	0.85	59	<0.30	125	928,000	5.22	8.3	<0.50	<2.0	7,980,000	<0.050	<5.0	2.18	1.24	4.3
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	D	8.8	<0.50	<2.0	8.8	<0.50	3,530	<0.050	253,000	<0.50	<0.050	0.63	<10	<0.30	128	777,000	3.65	7.8	<0.50	<2.0	6,930,000	<0.050	<5.0	2.05	1.16	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	T	83.8	<0.50	<2.0	9.4	<0.50	3,540	<0.050	252,000	<0.50	<0.050	0.64	42	<0.30	127	775,000	5.01	7.8	<0.50	<2.0	6,890,000	<0.050	<5.0	2.00	1.25	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	D	6.0 J	<0.50	<2.0	9.6	<0.50	2,740	<0.050	206,000	<0.50	<0.050 UJ	0.69 J	<10	<0.30	128	685,000	4.54	6.9	<0.50	<3.0	5,600,000	<0.050	<5.0	1.89	1.02	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	T	35.5	<0.50	<2.0	9.9	<0.50	2,940	<0.050	220,000	<0.50	0.053	2.49 J	35	<0.30 UJ	141	729,000	4.79	7.6	<0.50	<2.0	6,060,000	<0.050	<5.0	1.97	1.17	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.1	<0.50	3,540	<0.050	325,000	<0.50	0.109	0.83	<10	<0.30	133	1,030,000	3.40	8.6	0.77	<2.0	8,320,000	<0.050	<5.0	2.39	1.38	4.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	T	29.6	<0.50	<2.0	10.0	<0.50	3,440	<0.050	315,000	<0.50	<0.050	0.57	39	<0.30	130	999,000	3.72	8.5	<0.50	<2.0	7,740,000	<0.050	<5.0	2.50	1.46	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	D	20.6	<0.50	<2.0	8.2	<0.50	2,870	<0.050	211,000	<0.50	0.076	0.5	<10	<0.30	108	671,000	5.74	6.7	<0.50	<2.0	5,770,000	<0.050	<5.0	1.71	0.95	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	T	42	<0.50	<2.0	8	<0.50	2,760	<0.050	199,000	<0.50	<0.050	0.6	31	<0.30	105	631,000	7.54	6.5	<0.50	<2.0	5,440,000	<0.050	<5.0	1.61	1.03	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	D	<5.0	<0.50	<2.0	9.9	<0.50	3,500	<0.050	247,000	<0.50	0.089	1.02	<10	<0.30	134	780,000	3.01	7.7	<0.50	<2.0	6,760,000	<0.050	<5.0	2.03	1.17	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	T	22.0	<0.50	<2.0	10.6	<0.50	3,390	<0.050	263,000	<0.50	<0.050	0.83	31	<0.30	135	785,000	4.40	7.9	0.78	<2.0	7,220,000	<0.050	<5.0	1.99	1.29	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.2	<0.50	3,650	<0.050	310,000	<0.50	0.072	0.89	<10	<0.30	151	960,000	3.27	8.2	<0.50	<2.0	8,350,000	<0.050	<5.0	2.66	1.31	3.3
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	T	19.4	<0.50	<2.0	9.8	<0.50	3,710	<0.050	324,000	<0.50	<0.050	<0.50	27	<0.30	155	943,000	4.33	8.0	<0.50	<2.0	8,620,000	<0.050	<5.0	2.49	1.41	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	D	<5.0	<0.50	<2.0	12.1	<0.50	3,850	0.095	321,000	<0.50	<0.050	1.00	11	<0.30	94	937,000	2.15	8.2	0.57	<2.0	8,240,000	<0.050	<5.0	2.22	1.15	6.8
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	T	15.8	<0.50	<2.0	10.0	<0.50	4,140	0.081	309,000	<0.50	<0.050	0.52	24	<0.30	99	940,000	2.77	8.3	<0.50	<2.0	7,940,000	<0.050	<5.0	2.32	1.17	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	9.4	<0.50	3,180	<0.050	263,000	<0.50	<0.050	0.80	<10	<0.30	87	828,000	4.43	6.9	<0.50	<2.0	7,230,000	<0.050	<5.0	1.90	1.10	5.2
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	T	25.8	<0.50	<2.0	9.1	<0.50	3,110	<0.050	295,000	<0.50	<0.050	0.55	36	<0.30	87	862,000	5.23	7.0	<0.50	<2.0	7,660,000	<0.050	<5.0	1.92	1.15	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.9	<0.50	3,650	<0.050	324,000	<0.50	<0.050	0.77	<10	<0.30	132	943,000	3.58	8.8	0.70	<2.0	8,350,000	<0.050	<5.0	2.43	1.25	7.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	T	31.8	<0.50	<2.0	10.3	<0.50	3,810	0.058	333,000	<0.50	<0.050	0.73	51	<0.30	138	958,000	5.45	8.8	<0.50	<2.0	8,620,000	<0.050	<5.0	2.38	1.44	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	D	21.2	<0.50	<2.0	7.2	<0.50	2,670	0.076	211,000	<0.50	<0.050	0.71	<10	<0.30	99	648,000	6.19	5.1	<0.50	<2.0	5,220,000	<0.050	<5.0	1.38	0.81	5.6
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	T	61.3	<0.50	<2.0	7.6	<0.50	2,660	0.086	218,000	<0.50	<0.050	<0.50	51	<0.30	112	681,000	7.23	5.9	<0.50	<2.0	5,450,000	<0.050	<5.0	1.60	0.92	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	D	15.7	<0.50	<2.0	9.3	<0.50	3,020	<0.050	248,000	<0.50	<0.050	0.66	<10	<0.30	121	804,000	3.85	7.4	<0.50	<2.0	7,900,000	<0.050	<5.0	2.15	1.10	11.8
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	T	35.9	<0.50	<2.0	9.0	<0.50	3,060	<0.050	247,000	<0.50	<0.050	<0.50	28	<0.30	119	799,000	4.39	7.2	<0.50	<2.0	7,850,000	<0.050	<5.0	2.05	1.18	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	10.1	<0.50	3,000	<0.050	264,000	<0.50	<0.050	0.95	<10	<0.30	118	856,000	2.69	7.8	<0.50	<2.0	7,440,000	<0.050	<5.0	2.24	1.16	6.5
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-May-16	T	994	<0.50	<2.0	13.1	<0.50	2,960	0.083	254,000	1.38	0.544	4.03	1,390	1.28	118	815,000	32.1	7.3	1.70	<2.0	7,160,000	<0.050	50.0	2.30	4.09	9.2
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.3	<0.50	3,590	0.086	301,000	<0.50	<0.050	<0.50	<10	<0.30	138	911,000	3.17	8.4	<0.50	<2.0	7,900,000	<0.050	<5.0	2.63	1.13	4.8
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	T	21.8	<0.50	<2.0	9.4	<0.50	3,630	0.076	304,000	<0.50	<0.050	<0.50	29	<0.30	136	931,000	3.60	8.4	<0.50	<2.0	7,960,000	<0.050	<5.0	2.56	1.28	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	D	15.8	<0.50	<2.0	8.7	<0.50	3,120	0.063	256,000	<0.50	<0.050	0.77	<10	<0.30	128	812,000	3.56	7.2	<0.50	<2.0	7,410,000	<0.050	<5.0	2.09	1.00	3.1
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	D	12.5	<0.50	<2.0	11.9	<0.50	2,880	<0.050	265,000	<0.50	<0.050	0.63	<10	<0.30	124	845,000	3.77	7.8	<0.50	<2.0	7,070,000	<0.050	<5.0	2.27	1.04	4.2
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	T	46.4	<0.50	<2.0	8.6	<0.50	2,880	<0.050	262,000	<0.50	<0.050	0.55	50	<0.30	128	839,000	4.99	8.0	<0.50	<2.0	7,300,000	<0.050	<5.0	2.41	1.20	5.4
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	D	<5.0	<0.50	<2.0	9.6	<0.50	2,500	<0.050	225,000	<0.50	<0.050	0.79	<10	<0.30	103	716,000	3.86	6.4	<0.50	<2.0	6,350,000	<0.050	<5.0	2.02	0.77	<3.0
P6-3-NBO	Surface Water	P6-3	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	T	49.9	<0.50	<2.0	10.7	<0.50	2,540	<0.050	221,000	<0.50	0.052	0.73	78	<0.30	112	680,000	8.23	6.7	<0.50	<2.0	5,760,000	<0.050	<5.0	2.11	0.90	<3.0
P6-8-O	Surface Water	P6-8	NA	EB	SW	SW	SW	---	---	8-Dec-11	D	9.3 J	<0.50	<2.0	9.5	<0.50	3,340	0.061 J	307,000	<0.50	<0.050	0.55	<10	<0.30	135	920,000	3.39	7.9	<0.60	<2.0	7,930,000	<0.050	<5.0	2.13	1.40	<3.0
P6-8-O	Surface Water	P6-8	NA	EB	SW	SW	SW	---	---	8-Dec-11	T	27.4	<0.50	<2.0	9.6	<0.50	3,280	0.072 J	307,000	<0.50	<0.050	1.10	32	<0.30	134	941,000	4.62	7.8	<0.50	<2.0	7,980,000	<0.050	<5.0	2.17	1.34	3.2
P6-8-NBO	Surface Water	P6-8	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	D	10.4 J	<0.50	<2.0	8.8	<0.50	3,200	0.074 J	297,000	<0.50	<0.050	0.82	<10	<0.30	122	904,000	3.10	7.4	<0.50	<2.0	7,610,000	<0.050	<5.0	2.02	1.28	3.6
P6-8-NBO	Surface Water	P6-8	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	T	24.1	<0.50	<2.0	9.1	<0.50	3,350	0.080 J	293,000	<0.50	<0.050	0.88	19	<0.30	136	924,000	3.81	7.8	<0.50	<2.0	7,450,000	<0.050	<5.0	2.09	1.30	3.9
P6-8-NBO	Surface Water	P6-8	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	10.1	<0.50	3,710	<0.050	299,000	<0.50	<0.050	0.67	<10	<0.30	144	897,000	5.61	8.3	<0.50	<2.0	7,800,000	<0.050	<5.0	2.14	1.28	<3.0
P6-8-NBO	Surface Water	P6-8	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	T	57.2	<0.50	<2.0	9.7	<0.50	3,550	<0.050	303,000	<0.50	<0.050	0.62	90	<0.30	138	892,000	6.78	8.3	<0.50	<2.0	7,760,000	<0.050	<5.0	2.17	1.72	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	8-Dec-11	D	7.5 J	<0.50	<2.0	9.3	<0.50	3,300	0.065 J	296,000	<0.50	<0.050	0.51	<10	<0.30	134	892,000	3.16	7.6	<0.50	<2.0	7,710,000	<0.050	<5.0	2.05	1.30	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	8-Dec-11	T	16.0	<0.50	<2.0	8.6	<0.50	3,310	0.065 J	309,000	<0.50	<0.050	0.71	20	<0.30	132	925,000	3.90	7.6	<0.50	<2.0	7,880,000	<0.050	<5.0	2.11	1.37	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	13-Mar-12	D	10.1	<0.50	<2.0	9.4	<0.50	3,890	0.088	319,000	<0.10	<0.050	0.76	<10	<0.30	151	962,000	3.45	8.7	0.56	<2.0	8,010,000	<0.050	<5.0	2.53	1.42	4.2
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	11-Jun-12	D	15.2	<0.50	<2.0	6.3	<0.50	2,710	0.113	212,000	1.07	<0.050	0.82	<10	<0.30	101	689,000	1.88	6.5	1.12	<2.0	5,280,000	<0.050	<5.0	1.82	1.07	4.1
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	11-Jun-12	T	35.7	<0.50	<2.0	7.4	<0.50	2,710	0.139	218,000	<0.50	<0.050	0.66	30	<0.30	108	705,000	3.23	6.5	<0.50	<2.0	5,350,000	<0.050	<5.0	1.90	1.07	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10.3	<0.50	3,870	0.075	307,000	<0.50	<0.050	0.84	<10	<0.30	149	931,000	4.45	8.8	<0.50	<2.0	8,340,000	<0.050	<5.0	2.46	1.4	4.1
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	18-Sep-12	T	61.9	<0.50	<2.0	9.8	<0.50	3,840	0.068	302,000	<0.50	0.066	0.95	68	<0.30	145	932,000	6.75	8.4	0.52	<2.0	8,170,000	<0.050	<5.0	2.38	1.5	4.5
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	13-Nov-12	D	18.8	<0.50	<2.0	9.2	<0.50	3,090	0.116	236,000	<0.50	0.061	0.96	<10	<0.30	124	802,000	7.77	7.1	<0.50	<2.0	6,000,000	<0.050	<5.0	1.84	1.11	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	13-Nov-12	T	31.0	<0.50	<2.0	8.9	<0.50	2,910	0.091	231,000	<0.50	<0.050	0.74	22	<0.30	121	777,000	7.72	6.9	<0.50	<2.0	5,760,000	<0.050	<5.0	1.87	1.13	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	10-Dec-12	D	21.5	<0.50	<2.0	7.8	<0.50	2,650	<0.050	203,000	<0.50	<0.050	0.92	<10	<0.30	87	643,000	3.17	6.2	<0.50	<2.0	5,660,000	<0.050	<5.0	1.60	0.90	3.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	10-Dec-12	T	44.2	<0.50	<2.0	8.5	<0.50	2,870	<0.050	208,000	<0.50	<0.050	0.71	25	<0.30	98	648,000	3.81	6.8	<0.50	<2.0	5,820,000	<0.050	<5.0	1.71	0.98	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Jan-13	D	6.2	0.53	<2.0	10.3	<0.50	4,030	<0.050	302,000	<0.50	0.451	0.59	<10	<0.30	142	914,000	4.50	9.4	<0.50	<2.0	8,100,000	<0.050	<5.0	2.45	1.27	3.3
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Jan-13	T	38.2	<0.50	<2.0	8.9	<0.50	3,520	<0.050	288,000	<0.50	<0.050	1.04	40	<0.30	126	884,000	4.20	8.2	<0.50	<2.0	7,740,000	<0.050	<5.0	2.18	1.26	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	11-Mar-13	D	10.3	<0.50	<2.0	8.3	<0.50	3,400	<0.050	251,000	<0.50	<0.050	0.98	<10	<0.30	125	764,000	3.98	7.8	<0.50	<2.0	6,820,000	<0.050	<5.0	2.04	1.17	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	11-Mar-13	T	22.5	<0.50	<2.0	8.3	<0.50	3,470	<0.050	250,000	<0.50	<0.050	0.52	23	<0.30	126	764,000	4.58	7.7	<0.50	<2.0	6,780,000	<0.050	<5.0	2.02	1.21	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	24-Jun-13	D	8.7	<0.50	<2.0	10.0	<0.50	2,660	<0.050	218,000	<0.50	0.099	1.54	<10	<0.30	123	728,000	3.31	6.9	0.51	<5.0	5,110,000	<0.050	<5.0	1.89	1.15	3.6
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	24-Jun-13	T	1,050	<0.50	<3.0	13.5	<0.50	2,730	0.070	218,000	1.43	0.587	3.67	1,280	1.57	135	710,000	40.9	6.9	1.56	<2.0	5,150,000	<0.050	48.3	2.07	4.40	10.5
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.2	<0.50	3,570	<0.050	301,000	<0.50	0.138	0.84	<10	<0.30	125	960,000	2.66	8.2	0.71	<2.0	7,760,000	<0.050	<5.0	2.38	1.25	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	20-Sep-13	T	13.4	<0.50	<2.0	9.9	<0.50	3,350	<0.050	316,000	<0.50	<0.050	<0.50	21	<0.30	122	966,000	3.13	8.0	<0.50	<2.0	7,760,000	<0.050	<5.0	2.35	1.41	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.0	<0.50	3,410	<0.050	291,000	<0.50	<0.050	<0.50	<10	<0.30	131	890,000	3.15	8.3	<0.50	<2.0	7,630,000	<0.050	<5.0	2.31	1.29	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Dec-13	T	35.9	<0.50	<2.0	9.4	<0.50	3,520	0.055	300,000	<0.50	0.052	0.62	57	<0.30	136	918,000	4.16	8.6	<0.50	<2.0	7,740,000	<0.050	<5.0	2.38	1.44	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Mar-14	D	20.0	<0.50	<2.0	8.6	<0.50	2,870	<0.050	213,000	<0.50	0.097	0.91	<10	<0.30	105	670,000	4.94	6.9	0.54	<2.0	5,590,000	<0.050	<5.0	1.69	1.00	4.2
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Mar-14	T	56.2	<0.50	<2.0	8.5	<0.50	2,780	<0.050	204,000	<0.50	0.052	0.72	82	<0.30	107	650,000	9.81	6.4	<0.50	<2.0	5,350,000	<0.050	<5.0	1.70	1.02	3.1
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	D	8.7	<0.50	<2.0	10.2	<0.50	3,370	<0.050	241,000	<0.50	0.100	0.83	12	<0.30	131	777,000	2.71	7.9	<0.50	<2.0	6,380,000	<0.050	<5.0	2.07	1.33	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	T	16.2	<0.50	<2.0	10.0	<0.50	3,460	<0.050	252,000	<0.50	<0.050	0.65	21	<0.30	133	791,000	4.19	7.7	<0.50	<2.0	6,890,000	<0.050	<5.0	1.95	1.26	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.9	<0.50	3,930	<0.050	312,000	<0.50	<0.050	0.82	<10	<0.30	157	957,000	3.56	8.0	<0.50	<2.0	8,540,000	<0.050	<5.0	2.58	1.38	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	T	21.3	<0.50	<2.0	9.4	<0.50	3,850	<0.050	318,000	<0.50	0.057	<0.50	38	<0.30	150	967,000	4.39	7.8	<0.50	<2.0	8,620,000	<0.050	<5.0	2.47	1.42	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	10-Mar-15	D	8.1	<0.50	<2.0	10.3	<0.50	4,010	0.051	302,000	<0.50	<0.050	1.14	<10	<0.30	99	905,000	2.57	8.3	<0.50	<2.0	7,780,000	<0.050	<5.0	2.26	1.03	6.2
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	10-Mar-15	T	26.0	<0.50	<2.0	9.9	<0.50	4,210	0.057	314,000	<0.50	<0.050	0.57	36	<0.30	103	959,000	3.39	8.4	<0.50	<2.0	8,150,000	<0.050	<5.0	2.33	1.25	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.8	<0.50	2,780	<0.050	261,000	<0.50	<0.050	0.80	<10	<0.30	78	807,000	4.47	6.7	<0.50	<2.0	7,210,000	<0.050	<5.0	1.74	0.99	3.7
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	T	30.9	<0.50	<2.0	9.6	<0.50	3,160	<0.050	269,000	<0.50	<0.050	<0.50	44	<0.30	87	842,000	5.76	6.9	<0.50	<2.0	7,360,000	<0.050	<5.0	1.88	1.17	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.0	<0.50	3,530	<0.050	316,000	<0.50	<0.050	0.79	<10	<0.30	116	910,000	2.92	8.6	<0.50	<2.0	8,020,000	<0.050	<5.0	2.22	1.29	7.9
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Sep-15	T	16.8	<0.50	<2.0	10.1	<0.50	3,440	<0.050	316,000	<0.50	0.078	0.85	34	<0.30	129	928,000	4.50	8.3	<0.50	<2.0	8,100,000	<0.050	<5.0	2.24	1.40	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Dec-15	D	21.8	<0.50	<2.0	6.6	<0.50	2,680	0.082	218,000	<0.50	<0.050	0.56	25	<0.30	100	693,000	2.76	5.3	<0.50	<2.0	5,370,000	<0.050	<5.0	1.47	0.86	5.4
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Dec-15	T	67.2	<0.50	<2.0	6.6	<0.50	2,780	0.075	223,000	<0.50	<0.050	0.60	64	<0.30	100	711,000	4.19	5.2	<0.50	<2.0	5,550,000	<0.050	<5.0	1.40	1.01	5.2
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	26-Feb-16	D	20.7	<0.50	<2.0	9.0	<0.50	2,760	<0.050	227,000	<0.50	<0.050	0.94	<10	<0.30	109	731,000	3.71	6.7	<0.50	<2.0	6,280,000	<0.050	<5.0	2.08	1.05	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	26-Feb-16	T	34.5	<0.50	<2.0	8.2	<0.50	2,620	<0.050	223,000	<0.50	<0.050	<0.50	20.0	<0.30	108	717,000	4.28	6.4	<0.50	<2.0	6,160,000	<0.050	<5.0	1.98	1.11	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.2	<0.50	3,020	<0.050	261,000	<0.50	<0.050	1.06	<10	<0.30	120	849,000	2.82	8.1	<0.50	<2.0	7,380,000	<0.050	<5.0	2.33	1.15	7.3
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-May-16	T	130	<0.50	<2.0	8.9	<0.50	3,180	0.067	268,000	<0.50	0.090	1.22	176	<0.30	125	866,000	7.40	8.3	0.50	<2.0	7,600,000	<0.050	7.2	2.43	1.71	5.9
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.5	<0.50	3,200	<0.050	269,000	<0.50	0.060	0.78	<10	<0.30	127	855,000	2.82	7.4	<0.50	<2.0	7,690,000	<0.050	<5.0	2.41	1.14	3.1
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	T	12.8	<0.50	<2.0	8.8	<0.50	3,330	<0.050	265,000	<0.50	<0.050	0.56	19	<0.30	127	868,000	3.63	7.6	<0.50	<2.0	7,570,000	<0.050	<5.0	2.44	1.20	3.2
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	24-Nov-16	D	15.0	<0.50	<2.0	8.1	<0.50	3,180	<0.050	253,000	<0.50	<0.050	0.64	12	<0.30	126	811,000	3.60	7.4	<0.50	<2.0	7,340,000	<0.050	<5.0	2.04	1.05	5.7
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	24-Nov-16	T	37.2	<0.50	<2.0	9.1	<0.50	3,200	<0.050	266,000	<0.50	<0.050	0.59	42	<0.30	130	833,000	4.04	7.6	<0.50	<2.0	7,150,000	<0.050	<5.0	2.18	1.07	74.6
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Mar-17	D	16.6	<0.50	<2.0	12.9	<0.50	2,720	<0.050	238,000	<0.50	<0.050	0.64	<10	<0.30	117	758,000	3.15	7.5	<0.50	<2.0	6,120,000	<0.050	<5.0	2.23	1.08	4.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	14-Mar-17	T	44.1	<0.50	<2.0	8.2	<0.50	2,700	<0.050	245,000	<0.50	<0.050	0.53	40	<0.30	118	779,000	3.92	7.5	<0.50	<2.0	6,450,000	<0.050	<5.0	2.17	1.07	16.9
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Jun-17	D	6.7	<0.50	<2.0	10.0	<0.50	2,410	<0.050	213,000	<0.50	<0.050	0.87	<10	<0.30	99	658,000	4.55	6.5	<0.50	<2.0	5,920,000	<0.050	<5.0	1.93	0.83	<3.0
P6-12-O	Surface Water	P6-12	NA	EB	SW	SW	SW	---	---	9-Jun-17	T	45.8	<0.50	<2.0	11.3	<0.50	2,450	<0.050	208,000	<0.50	<0.050	<0.50	68	<0.30	100	633,000	6.72	6.4	<0.50	<2.0	5,370,000	<0.050	<5.0	1.89	0.99	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	D	10.3 J	<0.50	<2.0	8.4	<0.50	3,080	0.051 J	287,000	<0.50	<0.050	0.57	<10	<0.30	122	850,000	3.03	7.1	<0.50	<2.0	7,370,000	<0.050	<5.0	1.99	1.23	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	T	86.4	<0.50	<2.0	9.1	<0.50	3,110	0.077 J	288,000	<0.50	0.078	1.41	116	<0.30	125	844,000	6.80	8.0	<0.60	<2.0	7,240,000	<0.050	<5.0	2.02	1.59	4.2
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	D	11.8	<0.50	<2.0	9.0	<0.50	3,520	0.124	290,000	<0.10	<0.050	0.71	<10	<0.30	134	866,000	2.90	7.8	<0.50	<2.0	7,670,000	<0.050	<5.0	2.29	1.24	3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	D	18.0	<0.50	<2.0	7.4	<0.50	2,540	0.052	205,000	<0.50	<0.050	0.84	13	<0.30	100	685,000	2.13	6.2	<0.50	<2.0	5,310,000	<0.050	<5.0	1.72	1.05	6.2
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	T	123	<0.50	<2.0	8.9	<0.50	2,530	0.145	207,000	<0.50	0.063	1.23	158	<0.30	100	669,000	6.02	6.0	<0.50	<2.0	5,330,000	<0.050	<5.0	1.73	1.39	6.7
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.7	<0.50	3,680	0.07	270,000	<0.50	<0.050	0.99	<10	<0.30	136	858,000	4.05	8.2	0.51	<2.0	7,310,000	<0.050	<5.0	2.3	1.19	3.8
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	T	102	<0.50	<2.0	9.9	<0.50	3,780	0.078	282,000	<0.50	0.103	1.08	170	<0.30	140	916,000	7.66	8.3	0.62	<2.0	7,820,000	<0.050	<5.0	2.39	1.63	3.2
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	D	23.4	<0.50	<2.0	7.8	<0.50	2,030	<0.050	195,000	<0.50	<0.050	0.71	<10	<0.30	79	599,000	3.76	5	<0.50	<2.0	5,360,000	<0.050	<5.0	1.38	0.76	4.7
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	T	53.2	<0.50	<2.0	7.2	<0.50	1,850	<0.050	193,000	<0.50	<0.050	1.48	46	<0.30	77	602,000	5.32	4.6	<0.50	<2.0	5,320,000	<0.050	<5.0	1.37	0.74	4.1
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.2	<0.50	3,390	<0.050	313,000	<0.50	0.226	<0.50	<10	<0.30	124	947,000	5.24	7.8	<0.50	<2.0	8,410,000	<0.050	<5.0	2.08	1.07	4.5
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	T	135	<0.50	<2.0	9.4	<0.50	3,410	<0.050	305,000	<0.50	0.063	1.08	178	<0.30	120	923,000	8.91	7.8	<0.50	<2.0	8,190,000	<0.050	8.5	2.08	1.47	4.4
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	D	12.0	<0.50	<2.0	7.9	<0.50	3,330	<0.050	248,000	<0.50	<0.050	0.77	<10	<0.30	121	741,000	4.15	7.6	<0.50	<2.0	6,700,000	<0.050	<5.0	1.94	1.03	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	T	51.1	<0.50	<2.0	8.0	<0.50	3,380	<0.050	248,000	<0.50	<0.050	0.69	62	<0.30	124	746,000	5.16	7.5	<0.50	<2.0	6,650,000	<0.050	<5.0	1.97	1.28	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	D	8.1	<0.50	<2.0	10.4	<0.50	2,870	<0.050	216,000	<0.50	0.095	1.08	<10	<0.30	131	715,000	3.30	7.4	0.54	<2.0	5,820,000	<0.050	<5.0	2.03	1.13	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	T	138	<0.50	<2.0	10.4	<0.50	2,890	0.064	227,000	0.52	0.098	1.46	164	<0.30	204	755,000	8.82	7.2	0.56	<3.0	6,130,000	<0.050	6.3	1.94	1.61	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.5	<0.50	3,520	<0.050	310,000	<0.50	0.094	0.91	<10	<0.30	129	950,000	2.92	8.3	<0.50	<2.0	7,850,000	<0.050	<5.0	2.34	1.36	4.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	T	20.4	<0.50	<2.0	10.4	<0.50	3,350	<0.050	307,000	<0.50	<0.050	0.52	33	<0.30	122	956,000	3.48	7.8	<0.50	<2.0	7,720,000	<0.050	<5.0	2.35	1.19	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.7	<0.50	3,330	<0.050	292,000	<0.50	<0.050	<0.50	<10	<0.30	130	892,000	3.37	8.0	0.55	<2.0	7,570,000	<0.050	<5.0	2.24	1.16	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	T	45.0	<0.50	<2.0	10.2	<0.50	3,420	0.062	302,000	<0.50	<0.050	0.53	65	<0.30	132	909,000	4.77	8.4	<0.50	<2.0	7,740,000	<0.050	<5.0	2.37	1.43	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	D	29.0	<0.50	<2.0	8.4	<0.50	2,780	<0.050	207,000	<0.50	0.067	0.77	21	<0.30	104	663,000	5.48	6.7	<0.50	<2.0	5,440,000	<0.050	<5.0	1.67	1.05	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	T	46.7	<0.50	<2.0	8.0	<0.50	2,740	<0.050	206,000	<0.50	0.059	0.72	42	<0.30	103	646,000	6.45	6.4	<0.50	<2.0	5,410,000	<0.050	<5.0	1.67	1.07	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	D	<5.0	<0.50	<2.0	11.0	<0.50	3,500	<0.050	250,000	<0.50	0.082	0.97	<10	<0.30	133	797,000	2.61	7.7	0.50	<2.0	6,810,000	<0.050	<5.0	1.99	1.23	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	T	155	<0.50	<2.0	11.4	<0.50	3,380	<0.050	250,000	<0.50	0.160	1.69	206	0.38	131	789,000	17.2	7.5	0.59	<2.0	6,820,000	<0.050	6.5	2.01	1.85	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.8	<0.50	3,910	<0.050	310,000	<0.50	0.051	0.81	<10	<0.30	152	941,000	3.51	7.8	<0.50	<2.0	8,340,000	<0.050	<5.0	2.53	1.22	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	T	30.6	<0.50	<2.0	9.7	<0.50	3,810	<0.050	309,000	<0.50	0.055	<0.50	53	<0.30	153	928,000	5.45	7.9	<0.50	<2.0	8,180,000	<0.050	<5.0	2.51	1.52	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	D	<5.0	<0.50	<2.0	11.1	<0.50	4,020	0.081	300,000	<0.50	<0.050	0.77	<10	<0.30	97	899,000	2.38	8.4	<0.50	<2.0	7,660,000	<0.050	<5.0	2.40	1.16	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	T	102	<0.50	<2.0	10.4	<0.50	4,100	0.089	310,000	<0.50	0.068	0.67	128	<0.30	98	947,000	5.59	8.4	<0.50	<2.0	8,010,000	<0.050	5.4	2.33	1.50	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	11.2	<0.50	3,270	<0.050	285,000	<0.50	<0.050	0.84	<10	<0.30	90.0	854,000	3.16	7.7	<0.50	<2.0	7,400,000	<0.050	<5.0	2.01	1.10	3.7
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	T	192	<0.50	<2.0	11.2	<0.50	3,200	<0.050	291,000	<0.50	0.123	1.05	267	<0.30	88	843,000	7.39	6.7	0.55	<2.0	7,430,000	<0.050	11.3	1.99	1.71	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.9	<0.50	3,520	<0.050	312,000	<0.50	<0.050	0.96	<10	<0.30	121	911,000	2.96	8.2	<0.50	<2.0	8,210,000	<0.050	<5.0	2.17	1.27	10.7
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	T	19.6	<0.50	<2.0	10.6	<0.50	3,440	<0.050	316,000	<0.50	0.056	0.84	33	<0.30	124	937,000	4.37	9.0	<0.50	<2.0	8,290,000	<0.050	<5.0	2.30	1.26	3.2
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	D	29.2	<0.50	<2.0	7.6	<0.50	2,030	<0.050	157,000	<0.50	<0.050	0.53	<10	<0.30	80.0	478,000	3.60	4.1	<0.50	<2.0	3,970,000	<0.050	<5.0	1.12	0.85	8.9
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	T	607	<0.50	<2.0	9.3	<0.50	2,060	0.062	155,000	0.77	0.171	1.53	630	0.74	79	470,000	20.2	4.3	0.57	<2.0	3,890,000	<0.050	28.4	1.23	2.29	7.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	D	17.2	<0.50	<2.0	9.4	<0.50	2,850	<0.050	241,000	<0.50	<0.050	0.76	<10	<0.30	111	761,000	3.73	6.9	<0.50	<2.0	7,570,000	<0.050	<5.0	2.04	1.00	15.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	T	58.0	<0.50	<2.0	9.4	<0.50	2,960	<0.050	246,000	<0.50	<0.050	0.75	47	<0.30	123	793,000	4.70	7.3	<0.50	<2.0	7,850,000	<0.050	<5.0	2.06	1.15	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.5	<0.50	3,030	<0.050	256,000	<0.50	<0.050	0.74	<10	<0.30	117	827,000	2.72	7.8	<0.50	<2.0	7,260,000	<0.050	<5.0	2.25	1.15	29.8
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-May-16	T	175	<0.50	<2.0	8.3	<0.50	2,880	0.058	256,000	<0.50	0.132	1.41	235	<0.30	123	817,000	7.55	7.2	0.55	<2.0	7,270,000	<0.050	9.2	2.26	1.73	3.5
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.9	<0.50	3,450	0.072	290,000	<0.50	<0.050	0.93	<10	<0.30	130	882,000	2.93	8.0	<0.50	<2.0	7,680,000	<0.050	<5.0	2.45	1.15	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	T	40.6	<0.50	<2.0	10.2	<0.50	3,610	0.070	292,000	<0.50	0.073	0.61	55	<0.30	142	880,000	10.3	8.7	0.70	<2.0	7,690,000	<0.050	<5.0	2.56	1.59	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	D	16.6	<0.50	<2.0	8.8	<0.50	2,880	0.053	248,000	<0.50	<0.050	0.94	12	<0.30	118	807,000	3.17	7.5	<0.50	<2.0	7,140,000	<0.050	<5.0	2.07	1.17	4.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	T	140	<0.50	<2.0	10.7	<0.50	2,960	0.056	259,000	<0.50	0.071	1.12	152	0.37	123	804,000	8.50	7.6	0.69	<2.0	7,180,000	<0.050	5.3	2.16	1.65	9.3
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	D	17.5	<0.50	<2.0	11.8	<0.50	2,650	<0.050	233,000	<0.50	<0.050	0.55	<10	<0.30	110	755,000	3.12	7.0	<0.50	<2.0	5,980,000	<0.050	<5.0	2.14	1.01	3.2
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	T	48.8	<0.50	<2.0	8.5	<0.50	2,620	<0.050	242,000	<0.50	<0.050	<0.50	49	<0.30	115	779,000	4.44	7.3	<0.50	<2.0	6,370,000	<0.050	<5.0	2.19	1.05	11.6
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	D	5.8	<0.50	<2.0	9.8	<0.50	2,350	<0.050	215,000	<0.50	<0.050	1.65	12	<0.30	96	664,000	4.14	6.3	<0.50	<2.0	6,010,000	<0.050	<5.0	1.86	0.76	<3.0
P6-12-NBO	Surface Water	P6-12	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	T	36.5	<0.50	<2.0	10.6	<0.50	2,350	<0.050	205,000	<0.50	<0.050	0.71	57	<0.30	97	632,000	6.34	5.9	<0.50	<2.0	5,370,000	<0.050	<5.0	1.87	0.89	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	13-Mar-12	D	11.9	<0.50	<2.0	11.7	<0.50	3,910	0.067	316,000	<0.10	0.086	0.57	<10	<0.30	148	935,000	89.6	8.6	0.52	<2.0	8,130,000	<0.050	<5.0	2.47	0.83	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	6-Jun-12	D	10.2	<0.50	<2.0	7.7	<0.50	2,890	0.095	240,000	<0.50	<0.050	0.65	<10	<0.30	113	797,000	2.07	6.7	<0.50	<2.0	7,100,000	0.069	<5.0	2.01	1.13	5.1
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.8	<0.50	3,970	0.093	322,000	<0.50	<0.050	0.59	<10	<0.30	152	950,000	4.01	9.1	<0.50	<2.0	8,760,000	<0.050	<5.0	2.53	1.36	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	18-Sep-12	T	30.9	<0.50	<2.0	9.5	<0.50	3,990	0.073	319,000	<0.50	<0.050	0.6	44	<0.30	152	982,000	4.60	8.7	<0.50	<2.0	8,670,000	<0.050	<5.0	2.5	1.43	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	10-Dec-12	---													Well Not Sampled												
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.4	<0.50	3,780	<0.050	298,000	<0.50	<0.050	0.66	<10	<0.30	132	907,000	4.87	8.6	<0.50	<2.0	7,750,000	<0.050	<5.0	2.26	1.14	3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-Jan-13	T	26.5	<0.50	<2.0	8.4	<0.50	3,450	<0.050	296,000	<0.50	<0.050	0.78	34	<0.30	123	893,000	5.33	8.1	<0.50	<2.0	7,710,000	<0.050	<5.0	2.10	1.21	3.1
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	11-Mar-13	D	7.7	<0.50	<2.0	9.7	<0.50	3,540	<0.050	264,000	<0.50	<0.050	0.75	<10	<0.30	127	812,000	4.35	7.8	<0.50	<2.0	7,220,000	<0.050	<5.0	2.07	1.12	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	11-Mar-13	T	27.1	<0.50	<2.0	9.5	<0.50	3,620	<0.050	261,000	<0.50	<0.050	0.61	32	<0.30	129	803,000	5.07	8.2	<0.50	<2.0	7,130,000	<0.050	<5.0	2.06	1.24	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	24-Jun-13	D	7.7	<0.50	<2.0	9.2	<0.50	2,650	0.092	213,000	<0.50	0.099	1.15	<10	<0.30	117	701,000	2.62	6.9	0.87	<3.0	5,100,000	<0.050	<5.0	1.88	1.17	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	24-Jun-13	T	23.7	<0.50	<2.0	9.3	<0.50	2,840	<0.050	222,000	<0.50	0.058	0.74	21	<0.30	136	743,000	4.10	7.3	0.52	<2.0	5,240,000	<0.050	<5.0	1.96	1.25	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.3	<0.50	3,590	<0.050	321,000	<0.50	0.112	0.73	<10	<0.30	133	981,000	3.14	8.8	0.72	<2.0	7,900,000	<0.050	<5.0	2.48	1.31	4.3
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	20-Sep-13	T	13.4	<0.50	<2.0	10.5	<0.50	3,520	<0.050	309,000	<0.50	<0.050	<0.50	21	<0.30	127	968,000	3.45	8.7	<0.50	<2.0	7,780,000	<0.050	<5.0	2.32	1.46	4.8
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Mar-14	D	20.6	<0.50	<2.0	8.4	<0.50	2,830	<0.050	203,000	<0.50	0.079	0.69	<10	<0.30	105	632,000	6.56	6.7	<0.50	<2.0	5,270,000	<0.050	<5.0	1.63	0.95	3.4
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Mar-14	T	44	<0.50	<2.0	7.8	<0.50	2,760	<0.050	202,000	<0.50	<0.050	0.6	35	<0.30	102	627,000	6.97	6.6	<0.50	<2.0	5,310,000	<0.050	<5.0	1.58	1.06	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	13-Jun-14	D	7.7	<0.50	<2.0	10.3	<0.50	3,340	<0.050	250,000	<0.50	0.102	0.78	<10	<0.30	136	773,000	2.76	7.8	0.59	<2.0	6,790,000	<0.050	<5.0	2.00	1.29	3.1
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	13-Jun-14	T	20.2	<0.50	<2.0	10.1	<0.50	3,390	<0.050	244,000	<0.50	0.055	0.64	26	<0.30	129	772,000	4.70	7.6	<0.50	<2.0	6,370,000	<0.050	<5.0	1.96	1.32	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	11.4	<0.50	4,050	<0.050	299,000	<0.50	<0.050	0.68	<10	<0.30	153	932,000	3.31	7.9	0.60	<2.0	8,150,000	<0.050	<5.0	2.49	1.33	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	12-Sep-14	T	33.9	<0.50	<2.0	10.6	<0.50	4,050	<0.050	309,000	<0.50	0.056	0.63	54	<0.30	163	936,000	5.20	8.3	<0.50	<2.0	8,390,000	<0.050	<5.0	2.53	1.42	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	10-Mar-15	D	7.7	<0.50	<2.0	10.7	<0.50	4,070	0.084	310,000	<0.50	<0.050	1.26	<10	<0.30	96	944,000	2.34	8.2	0.56	<2.0	8,030,000	<0.050	<5.0	2.23	1.16	7.2
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	10-Mar-15	T	26.2	<0.50	<2.0	9.5	<0.50	4,170	0.070	308,000	<0.50	<0.050	0.53	21	<0.30	101	928,000	2.68	8.7	<0.50	<2.0	8,000,000	<0.050	<5.0	2.27	1.22	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.9	<0.50	3,330	<0.050	292,000	<0.50	<0.050	0.62	10.0	<0.30	95	886,000	4.09	7.3	<0.50	<2.0	7,610,000	<0.050	<5.0	2.00	1.23	35.1
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	17-Jun-15	T	25.7	<0.50	<2.0	8.6	<0.50	3,160	<0.050	305,000	<0.50	0.050	0.51	111	<0.30	88	910,000	5.22	7.6	<0.50	<2.0	8,200,000	<0.050	<5.0	1.89	1.18	48.9
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.2	<0.50	3,630	<0.050	315,000	<0.50	<0.050	0.89	<10	<0.30	123	927,000	3.29	8.8	<0.50	<2.0	8,000,000	<0.050	<5.0	2.35	1.24	5.8
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Sep-15	T	10.2	<0.50	<2.0	9.5	<0.50	3,530	<0.050	323,000	<0.50	<0.050	0.62	20.0	<0.30	128	948,000	3.93	8.8	<0.50	<2.0	8,300,000	<0.050	<5.0	2.38	1.24	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Dec-15	D	24.5	<0.50	<2.0	7.6	<0.50	2,520	0.069	205,000	<0.50	<0.050	0.55	<10	<0.30	96	649,000	5.04	4.9	<0.50	<2.0	5,070,000	<0.050	<5.0	1.32	0.88	6.9
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Dec-15	T	80.9	<0.50	<2.0	8.1	<0.50	2,620	0.078	212,000	<0.50	<0.050	<0.50	67	<0.30	99	663,000	8.37	5.3	<0.50	<2.0	5,220,000	<0.050	<5.0	1.40	0.94	6.7
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	26-Feb-16	D	12.5	<0.50	<2.0	10.2	<0.50	3,170	<0.050	264,000	<0.50	<0.050	0.59	<10	<0.30	132	849,000	3.65	7.9	<0.50	<2.0	8,300,000	<0.050	<5.0	2.24	1.19	10.8
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	26-Feb-16	T	112	<0.50	<2.0	10.3	<0.50	3,520	<0.050	285,000	<0.50	0.085	0.87	111	0.50	137	879,000	8.66	8.6	0.75	<2.0	8,650,000	<0.050	<5.0	2.40	1.49	7.6
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.5	<0.50	3,050	0.058	256,000	<0.50	0.050	0.91	<10	<0.30	119	836,000	2.78	7.6	<0.50	<2.0	7,220,000	<0.050	<5.0	2.32	1.15	8.2
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-May-16	T	54.1	<0.50	<2.0	8.4	<0.50	3,140	0.067	264,000	<0.50	0.055	0.77	47	<0.30	127	861,000	4.35	7.9	<0.50	<2.0	7,470,000	<0.050	<5.0	2.32	1.37	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.4	<0.50	3,580	0.099	297,000	<0.50	<0.050	0.79	<10	<0.30	134	907,000	2.83	8.3	<0.50	<2.0	7,950,000	<0.050	<5.0	2.65	1.13	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	18-Aug-16	T	28.4	<0.50	<2.0	10.2	<0.50	3,660	0.064	303,000	<0.50	<0.050	0.68	37	<0.30	140	926,000	4.68	8.8	<0.50	<2.0	8,120,000	<0.050	<5.0	2.77	1.37	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	24-Nov-16	D	16.9	<0.50	<2.0	9.3	<0.50	3,150	0.073	255,000	<0.50	<0.050	0.61	<10	<0.30	117	804,000	3.62	7.3	<0.50	<2.0	7,430,000	<0.050	<5.0	2.16	1.01	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	24-Nov-16	T	45.3	<0.50	<2.0	8.9	<0.50	3,170	<0.050	262,000	<0.50	<0.050	0.67	47	<0.30	127	805,000	4.92	7.3	<0.50	<2.0	7,100,000	<0.050	<5.0	2.10	1.11	5.6
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Mar-17	D	10.3	<0.50	<2.0	11.8	<0.50	2,960	<0.050	267,000	<0.50	<0.050	<0.50	<10	<0.30	126	875,000	3.02	8.1	<0.50	<2.0	7,050,000	<0.050	<5.0	2.40	1.13	4.6
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	14-Mar-17	T	30.5	<0.50	<2.0	8.7	<0.50	3,050	<0.050	304,000	<0.50	<0.050	0.58	37	<0.30	137	919,000	5.30	8.3	<0.50	<2.0	7,740,000	<0.050	<5.0	2.47	1.25	7.2
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-Jun-17	D	5.4	<0.50	<2.0	10.0	<0.50	2,690	<0.050	237,000	<0.50	<0.050	1.59	<10	<0.30	110	729,000	3.98	6.9	<0.50	<2.0	6,810,000	<0.050	<5.0	2.08	0.90	<3.0
P8-3-O	Surface Water	P8-3	NA	EB	SW	SW	SW	---	---	9-Jun-17	T	44.8	<0.50	<2.0	10.2	<0.50	2,640	<0.050	225,000	<0.50	<0.050	0.60	100	<0.30	111	696,000	6.63	6.6	<0.50	<2.0	5,860,000	<0.050	<5.0	2.09	0.93	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	D	11.9	<0.50	<2.0	10.9	<0.50	3,740	0.091	301,000	<0.10	<0.050	0.72	<10	<0.30	144	886,000	111	8.2	<0.50	<6.0	7,700,000	<0.050	<5.0	2.41	0.95	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.7	<0.50	3,810	0.077	291,000	<0.50	<0.050	0.87	<10	<0.30	146	962,000	4.89	8.8	<0.50	<2.0	8,070,000	<0.050	<5.0	2.44	1.23	3.4
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	T	115	<0.50	<2.0	10.4	<0.50	3,970	0.095	289,000	<0.50	0.099	0.86	182	<0.30	151	926,000	8.72	8.9	<0.50	<2.0	7,750,000	<0.050	6.1	2.55	1.85	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	---													Well Not Sampled												
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.1	<0.50	3,720	<0.050	309,000	<0.50	0.236	0.53	14	<0.30	131	925,000	7.33	8.6	<0.50	<2.0	7,950,000	<0.050	<5.0	2.23	1.15	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	T	39.7	<0.50	<2.0	8.0	<0.50	3,160	<0.050	295,000	<0.50	<0.050	0.65	51	<0.30	113	899,000	7.82	7.4	<0.50	<2.0	7,730,000	<0.050	<5.0	1.92	1.13	3.2
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	D	8.0	<0.50	<2.0	9.8	<0.50	3,630	<0.050	261,000	<0.50	<0.050	0.58	<10	<0.30	130	798,000	4.15	8.0	<0.50	<2.0	7,130,000	<0.050	<5.0	2.10	1.21	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	T	33.4	<0.50	<2.0	11.0	<0.50	3,620	<0.050	252,000	<0.50	<0.050	0.54	37	<0.30	130	766,000	5.41	7.8	<0.50	<2.0	6,940,000	<0.050	<5.0	2.08	1.26	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	D	6.9	<0.50	<2.0	12.7	<0.50	2,630	<0.050	218,000	<0.50	0.109	0.93	<10	<0.30	122	707,000	12.2	6.5	<0.50	<6.0	5,440,000	<0.050	<5.0	1.88	1.14	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	T	77.4	<0.50	<2.0	12.1	<0.50	2,750	<0.050	221,000	<0.50	0.086	1.02	91	<0.30	127	724,000	16.5	6.8	0.59	<2.0	5,570,000	<0.050	<5.0	1.91	1.24	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	10.9	<0.50	3,520	<0.050	316,000	<0.50	0.080	0.66	<10	<0.30	128	997,000	3.10	8.5	0.54	<2.0	8,100,000	<0.050	<5.0	2.38	1.43	3.4
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	T	27.0	<0.50	<2.0	10.3	<0.50	3,460	<0.050	314,000	<0.50	<0.050	0.55	38	<0.30	127	1,010,000	3.83	8.3	0.55	<2.0	8,140,000	<0.050	<5.0	2.37	1.49	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	D	22.1	<0.50	<2.0	8.1	<0.50	2,730	<0.050	203,000	<0.50	0.077	0.99	<10	<0.30	101	651,000	5.91	6.3	<0.50	<2.0	5,360,000	<0.050	<5.0	1.6	0.96	4.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	T	37.6	<0.50	<2.0	8.2	<0.50	2,850	<0.050	207,000	<0.50	<0.050	0.57	26	<0.30	106	655,000	6.72	6.8	<0.50	<2.0	5,500,000	<0.050	<5.0	1.67	1.01	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	D	<5.0	<0.50	<2.0	9.8	<0.50	3,410	<0.050	242,000	<0.50	0.082	0.70	<10	<0.30	129	762,000	2.86	7.7	0.53	<2.0	6,460,000	<0.050	<5.0	2.03	1.23	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	T	17.7	<0.50	<2.0	10.1	<0.50	3,490	<0.050	245,000	<0.50	<0.050	0.64	17	<0.30	136	773,000	4.30	7.7	<0.50	<2.0	6,690,000	<0.050	<5.0	2.00	1.20	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	11.0	<0.50	3,810	<0.050	324,000	<0.50	<0.050	0.75	<10	<0.30	149	940,000	3.60	8.3	0.72	<2.0	8,640,000	<0.050	<5.0	2.43	1.40	3.4
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	T	26.5	<0.50	<2.0	9.9	<0.50	3,660	<0.050	314,000	<0.50	<0.050	0.50	30.0	<0.30	148	951,000	4.01	7.9	<0.50	<2.0	8,440,000	<0.050	<5.0	2.43	1.33	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	D	9.0	<0.50	<2.0	11.7	<0.50	4,130	0.126	298,000	<0.50	<0.050	1.05	<10	<0.30	99	917,000	2.46	9.5	<0.50	<2.0	7,680,000	<0.050	<5.0	2.31	1.16	5.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	T	18.9	<0.50	<2.0	10.3	<0.50	4,020	0.103	300,000	<0.50	<0.050	0.53	27	<0.30	98	914,000	3.34	8.5	<0.50	<2.0	7,740,000	<0.050	<5.0	2.27	1.29	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	9.4	<0.50	3,100	<0.050	288,000	<0.50	<0.050	0.63	<10	<0.30	88	829,000	4.64	6.7	<0.50	<2.0	7,250,000	<0.050	<5.0	1.90	1.04	18.1
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	T	48.6	<0.50	<2.0	9.6	<0.50	3,150	<0.050	268,000	<0.50	<0.050	<0.50	66	<0.30	87	848,000	6.57	6.9	<0.50	<2.0	7,190,000	<0.050	<5.0	1.92	1.26	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	10.5	<0.50	3,380	<0.050	321,000	<0.50	0.057	0.85	<10	<0.30	128	958,000	3.92	8.7	0.62	<2.0	8,330,000	<0.050	<5.0	2.20	1.34	4.9
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	T	10.2	<0.50	<2.0	9.9	<0.50	3,790	<0.050	323,000	<0.50	0.062	0.68	18	<0.30	126	966,000	4.58	8.6	<0.50	<2.0	8,390,000	<0.050	<5.0	2.38	1.34	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	D	21.5	<0.50	<2.0	8.0	<0.50	2,520	0.090	208,000	<0.50	<0.050	0.58	<10	<0.30	96	641,000	7.66	5.0	<0.50	<2.0	5,190,000	<0.050	<5.0	1.41	0.78	6.5
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Dec-15	T	66.7	<0.50	<2.0	8.1	<0.50	2,580	0.082	215,000	<0.50	<0.050	<0.50	56	<0.30	100	671,000	9.04	5.3	<0.50	<2.0	5,350,000	<0.050	<5.0	1.42	0.92	3.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	D	16.2	<0.50	<2.0	8.5	<0.50	2,940	<0.050	242,000	<0.50	<0.050	0.73	<10	<0.30	112	775,000	3.80	7.0	<0.50	<2.0	7,640,000	<0.050	<5.0	2.09	1.08	4.1
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	T	47.6	<0.50	<2.0	8.8	<0.50	3,050	<0.050	258,000	<0.50	<0.050	0.90	41	<0.30	122	826,000	5.33	7.5	<0.50	<2.0	8,130,000	<0.050	<5.0	2.14	1.26	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.7	<0.50	3,030	<0.050	246,000	<0.50	<0.050	0.80	<10	<0.30	115	799,000	2.54	7.7	<0.50	<2.0	7,000,000	<0.050	<5.0	2.19	1.13	17.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-May-16	T	101	<0.50	<2.0	8.6	<0.50	2,950	0.070	253,000	<0.50	0.068	1.37	142	<0.30	117	819,000	6.02	7.6	<0.50	<2.0	7,200,000	<0.050	5.7	2.17	1.52	3.6
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.4	<0.50	3,630	0.077	301,000	<0.50	<0.050	0.56	<10	<0.30	135	910,000	2.71	8.7	<0.50	<2.0	7,960,000	<0.050	<5.0	2.57	1.18	5.5
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	T	30.4	<0.50	<2.0	9.3	<0.50	3,480	0.103	299,000	<0.50	<0.050	0.58	47	<0.30	138	913,000	4.69	8.5	<0.50	<2.0	7,860,000	<0.050	<5.0	2.57	1.26	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	D	18.6	<0.50	<2.0	8.5	<0.50	2,910	0.082	256,000	<0.50	<0.050	2.11	<10	<0.30	121	810,000	6.31	7.0	<0.50	<2.0	7,510,000	<0.050	<5.0	2.13	1.23	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	T	49.3	<0.50	<2.0	9.3	<0.50	3,110	0.073	255,000	<0.50	<0.050	0.69	49	<0.30	131	816,000	8.78	7.2	<0.50	<2.0	7,160,000	<0.050	<5.0	2.23	1.40	6.2
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	D	9.9	<0.50	<2.0	9.1	<0.50	3,080	<0.050	265,000	<0.50	<0.050	<0.50	<10	<0.30	136	856,000	3.71	8.4	<0.50	<2.0	6,950,000	<0.050	<5.0	2.50	1.17	3.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	T	39.1	<0.50	<2.0	8.8	<0.50	3,030	<0.050	296,000	<0.50	<0.050	<0.50	43	<0.30	135	886,000	4.94	8.4	<0.50	<2.0	7,650,000	<0.050	<5.0	2.51	1.17	6.3
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	D	<5.0	<0.50	<2.0	9.5	<0.50	2,540	<0.050	236,000	<0.50	<0.050	0.66	<10	<0.30	106	714,000	3.55	6.7	<0.50	<2.0	6,810,000	<0.050	<5.0	1.97	0.69	<3.0
P8-3-NBO	Surface Water	P8-3	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	T	54.7	<0.50	<2.0	11.2	<0.50	2,700	<0.050	224,000	<0.50	<0.050	0.87	78	<0.30	113	690,000	7.07	7.0	<0.50	<2.0	5,820,000	<0.050	<5.0	2.21	0.94	<3.0
P8-8-O	Surface Water	P8-8	NA	EB	SW	SW	SW	---	---	8-Dec-11	D	13.4 J	<0.50	<2.0	9.1	<0.50	3,220	0.065 J	290,000	<0.50	<0.050	0.76	<10	<0.30	131	865,000	3.47	7.6	<0.50	<2.0	7,690,000	<0.050	<5.0	2.14	1.33	6.5
P8-8-O	Surface Water	P8-8	NA	EB	SW	SW	SW	---	---	8-Dec-11	T	36.3	<0.50	<2.0	9.6	<0.50	3,320	0.063 J	301,000	<0.50	<0.050	0.90	43	<0.30	132	882,000	5.52	7.7	<0.50	<2.0	7,950,000	<0.050	<5.0	2.06	1.43	4.5

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID [3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	300	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS [2]	50	110	3	1,000	140	NS [2]	NS [2]	100	1,000	75	2	NS [2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
P8-8-NBO	Surface Water	P8-8	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	D	9.2 J	<0.50	<2.0	8.7	<0.50	3,260	0.065 J	301,000	<0.50	<0.050	0.55	<10	<0.30	132	895,000	3.32	7.7	<0.50	<2.0	7,730,000	<0.050	<5.0	2.13	1.32	<3.0
P8-8-NBO	Surface Water	P8-8	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	T	24.3	<0.50	<2.0	8.8	<0.50	3,330	0.058 J	309,000	<0.50	<0.050	0.73	27	<0.30	132	936,000	4.36	7.7	<0.50	<2.0	7,900,000	<0.050	<5.0	2.17	1.43	4.0
P8-8-NBO	Surface Water	P8-8	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	11.7	<0.50	3,500	0.058	297,000	<0.50	0.064	0.68	<10	<0.30	137	892,000	4.88	8.5	0.64	<2.0	7,670,000	<0.050	<5.0	2.38	1.35	3.7
P8-8-NBO	Surface Water	P8-8	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	T	40.2	<0.50	<2.0	10.6	<0.50	3,430	<0.050	313,000	<0.50	0.055	1.31	77	<0.30	134	913,000	6.38	8.5	1.08	<2.0	8,050,000	<0.050	<5.0	2.33	1.45	10.6
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	8-Dec-11	D	7.4 J	<0.50	<2.0	8.6	<0.50	3,210	0.063 J	301,000	<0.50	<0.050	0.52	<10	<0.30	130	896,000	2.98	7.5	<0.50	<2.0	7,850,000	<0.050	<5.0	2.10	1.30	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	8-Dec-11	T	16.8	<0.50	<2.0	8.7	<0.50	3,320	0.076 J	307,000	<0.50	<0.050	0.65	17	<0.30	131	936,000	3.80	7.8	<0.50	<2.0	7,950,000	<0.050	<5.0	2.19	1.35	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	13-Mar-12	D	11.7	<0.50	<2.0	9.6	<0.50	3,800	0.113	305,000	<0.10	<0.050	0.63	<10	<0.30	147	945,000	3.36	8.5	0.57	<2.0	7,800,000	<0.050	<5.0	2.51	1.19	4.6
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	11-Jun-12	D	17.5	<0.50	<2.0	5.8	<0.50	2,490	0.113	203,000	0.78	<0.050	1.14	16	<0.30	95	673,000	2.03	6.1	<0.50	<2.0	5,240,000	<0.050	<5.0	1.72	1.01	3.2
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	11-Jun-12	T	48.4	<0.50	<2.0	6.5	<0.50	2,470	0.051	204,000	<0.50	<0.050	0.68	138	<0.30	98	677,000	3.04	5.9	0.92	<2.0	5,160,000	<0.050	<5.0	1.69	1.31	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10	<0.50	3,720	0.099	327,000	<0.50	<0.050	0.92	23	<0.30	142	974,000	4.22	8.4	<0.50	<2.0	8,680,000	<0.050	<5.0	2.4	1.3	3
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	18-Sep-12	T	41.1	<0.50	<2.0	9.7	<0.50	3,800	0.081	306,000	<0.50	<0.050	0.74	33	<0.30	142	916,000	5.03	8.5	<0.50	<2.0	8,250,000	<0.050	<5.0	2.38	1.36	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	13-Nov-12	D	17.9	<0.50	<2.0	9.0	<0.50	3,110	0.108	238,000	<0.50	0.065	0.88	<10	<0.30	126	790,000	7.12	7.3	<0.50	<2.0	5,900,000	<0.050	<5.0	1.95	1.13	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	13-Nov-12	T	33.6	<0.50	<2.0	8.6	<0.50	3,120	0.106	246,000	<0.50	<0.050	0.70	30	<0.30	126	829,000	7.79	7.2	<0.50	<2.0	6,330,000	<0.050	<5.0	1.89	1.24	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	10-Dec-12	D	25.7	<0.50	<2.0	8.0	<0.50	2,590	<0.050	194,000	<0.50	<0.050	0.69	13	<0.30	88	618,000	3.38	6.0	<0.50	<2.0	5,410,000	<0.050	<5.0	1.60	0.88	3.4
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	10-Dec-12	T	42.9	<0.50	<2.0	8.4	<0.50	2,840	<0.050	207,000	<0.50	<0.050	0.77	26	<0.30	96	655,000	3.66	6.7	<0.50	<2.0	5,710,000	<0.050	<5.0	1.77	1.03	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	8.9	<0.50	3,580	<0.050	299,000	<0.50	0.244	0.54	14	<0.30	134	908,000	3.48	8.5	<0.50	<2.0	8,060,000	<0.050	<5.0	2.21	1.01	3.9
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Jan-13	T	29.0	<0.50	<2.0	8.1	<0.50	3,310	<0.050	307,000	<0.50	<0.050	0.55	36	<0.30	122	943,000	3.49	7.7	<0.50	<2.0	8,110,000	<0.050	<5.0	2.01	1.13	3.8
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	11-Mar-13	D	9.7	<0.50	<2.0	8.2	<0.50	3,380	<0.050	251,000	<0.50	<0.050	0.61	<10	<0.30	121	767,000	3.93	7.6	<0.50	<2.0	6,840,000	<0.050	<5.0	2.01	1.19	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	11-Mar-13	T	26.1	<0.50	<2.0	8.3	<0.50	3,460	<0.050	251,000	<0.50	<0.050	0.69	28	<0.30	124	766,000	4.61	7.6	0.55	<2.0	6,840,000	<0.050	<5.0	2.02	1.20	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	24-Jun-13	D	8.1	<0.50	<2.0	10.0	<0.50	2,740	<0.050	221,000	<0.50	<0.050	1.00	<10	<0.30	127	716,000	3.66	7.1	<0.50	<2.0	5,160,000	<0.050	<5.0	1.98	1.09	3.7
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	24-Jun-13	T	994	<0.50	<4.0	13.4	<0.50	2,730	0.054	229,000	1.18	0.520	6.20	1,170	1.65	139	739,000	31.6	6.9	1.49	<7.0	5,360,000	<0.050	38.3	2.03	4.11	7.2
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.2	<0.50	3,560	<0.050	302,000	<0.50	0.139	0.93	<10	<0.30	129	945,000	2.98	8.5	0.63	<2.0	7,640,000	<0.050	<5.0	2.36	1.34	3.8
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	20-Sep-13	T	20.6	<0.50	<2.0	10.3	<0.50	3,440	<0.050	311,000	<0.50	<0.050	0.85	31	<0.30	126	961,000	3.17	7.7	<0.50	<2.0	7,810,000	<0.050	<5.0	2.30	1.29	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.7	<0.50	3,540	0.066	304,000	<0.50	0.052	0.79	<10	<0.30	137	917,000	3.35	8.9	<0.50	<2.0	7,820,000	<0.050	<5.0	2.37	1.35	10.1
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Dec-13	T	39.3	<0.50	<2.0	9.7	<0.50	3,730	0.057	301,000	<0.50	<0.050	0.68	52	<0.30	143	915,000	4.24	9.0	0.66	<2.0	7,740,000	<0.050	<5.0	2.43	1.54	3.7
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Mar-14	D	20.6	<0.50	<2.0	8.1	<0.50	2,820	<0.050	207,000	<0.50	0.071	0.78	<10	<0.30	107	648,000	5.47	7.0	<0.50	<2.0	5,470,000	<0.050	<5.0	1.70	0.96	4.1
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Mar-14	T	47.6	<0.50	<2.0	8.2	<0.50	2,820	<0.050	200,000	<0.50	<0.050	0.56	40.0	<0.30	107	630,000	6.73	6.9	<0.50	<2.0	5,250,000	<0.050	<5.0	1.66	1.11	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	D	6.8 J	<0.50	<2.0	10.2	<0.50	3,400	<0.050	239,000	<0.50	0.080 J	1.12	<10	<0.30	133	749,000	2.79	7.6	0.77 J	<2.0	6,250,000	<0.050	<5.0	1.99	1.19	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	T	20.4 J	<0.50	<2.0	10.2	<0.50	3,380	<0.050	243,000	<0.50	0.055	0.87 J	23 J	<0.30	134	761,000	4.20	7.6	0.67 J	<2.0	6,360,000	<0.050	<5.0	1.94	1.28	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.1	<0.50	3,980	<0.050	316,000	<0.50	<0.050 UJ	0.59 J	<10	<0.30	158	956,000	3.42	8.5	<0.50	<2.0	8,560,000	<0.050	<5.0	2.48	1.37	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	T	17.2	<0.50	<2.0	9.8	<0.50	4,050	<0.050	307,000	<0.50	<0.050	<0.50 UJ	29	<0.30	162	942,000	4.01	8.5	<0.50	<2.0	8,290,000	<0.050	<5.0	2.45	1.44	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	10-Mar-15	D	6.1	<0.50	<2.0	11.1	<0.50	4,000	0.080	312,000	<0.50	<0.050	0.72	<10	<0.30	95	925,000	2.37	8.1	0.54	<2.0	8,070,000	<0.050	<5.0	2.24	1.13	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	10-Mar-15	T	26.0	<0.50	<2.0	9.4	<0.50	4,150	0.087	311,000	<0.50	<0.050	0.52	30.0	<0.30	98	928,000	2.94	8.4	<0.50	<2.0	8,030,000	<0.050	<5.0	2.35	1.23	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	8.2	<0.50	2,970	<0.050	290,000	<0.50	<0.050	<0.50	<10	<0.30	84	899,000	4.12	7.0	<0.50	<2.0	7,620,000	<0.050	<5.0	1.82	1.07	<3.0
DUP-3 (P8-12-O)	Surface water	P6-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	9.3	<0.50	3,140	<0.050	266,000	<0.50	<0.050	0.74	<10	<0.30	89	828,000	4.34	7.1	<0.50	<2.0	6,960,000	<0.050	<5.0	1.93	1.10	4.8
QA/QC RPD										Duplicates	D	---	---	---	13%	---	6%	---	9%	---	---	---	---	---	6%	8%	5%	1%	---	---	9%	---	---	6%	3%	---
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	T	24.2	<0.50	<2.0	9.3	<0.50	3,210	<0.050	294,000	<0.50	<0.050	<0.50	38	<0.30	91	883,000	4.98	7.1	<0.50	<2.0	7,610,000	<0.050	<5.0	1.97	1.17	<3.0
DUP-3 (P8-12-O)	Surface water	P6-12	NA	EB	SW	SW	SW	---	---	17-Jun-15	T	22.0	<0.50	<2.0	9.3	<0.50	3,220	0.064	288,000	<0.50	<0.050	0.57	31	<0.30	91	856,000	4.98	7.2	<0.50	<2.0	7,110,000	<0.050	<5.0	1.97	1.20	<3.0
QA/QC RPD										Duplicates	T	---	---	---	0%	---	0%	---	2%	---	---	---	---	---	0%	3%	0%	1%	---	---	7%	---	---	0%	3%	---
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.3	<0.50	3,470	<0.050	312,000	<0.50	<0.050	0.89	<10	<0.30	121	904,000	3.05	8.3	0.57	<2.0	8,120,000	<0.050	<5.0	2.12	1.18	8.1
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Sep-15	T	12.0	<0.50	<2.0	10.1	<0.50	3,570	0.056	318,000	<0.50	<0.050	1.15	18	<0.30	125	931,000	3.83	8.8	<0.50	<2.0	8,100,000	<0.050	<5.0	2.21	1.34	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Dec-15	D	22.0	<0.50	<2.0	6.4	<0.50	2,680	0.093	217,000	<0.50	<0.050	<0.50	<10	<0.30	104	684,000	2.84	5.5	<0.50	<2.0	5,490,000	<0.050	<5.0	1.47	0.83	<3.0
DUP-8	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	14-Dec-15	D	21.6	<0.50	<2.0	6.8	<0.50	2,500	0.067	215,000	<0.50	<0.050	0.66	<10	<0.30	98	684,000	2.80	5.2	<0.50	<2.0	5,470,000	<0.050	<5.0	1.50	0.86	3.9
QA/QC RPD										Duplicates	D	2%	---	---	6%	---	7%	33%	1%	---	---	---	---	---	6%	0%	1%	6%	---	---	0%	---	---	2%	4%	---
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Dec-15	T	80.2	<0.50	<2.0	7.2	<0.50	2,700	0.100	217,000	<0.50	<0.050	0.51	75	<0.30	107	690,000	4.33	5.6	<0.50	<2.0	5,410,000	<0.050	<5.0	1.55	1.06	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	26-Feb-16	D	22.2	<0.50	<2.0	8.5	<0.50	2,610	<0.050	220,000	<0.50	<0.050	1.42	<10	<0.30	106	710,000	3.89	6.4	<0.50	<2.0	6,090,000	<0.050	<5.0	1.83	0.92	4.3
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	26-Feb-16	T	35.3	<0.50	<2.0	9.3	<0.50	3,010	<0.050	231,000	<0.50	<0.050	<0.50	20.0	<0.30	118	740,000	4.27	7.3	<0.50	<2.0	6,380,000	<0.050	<5.0	2.01	1.09	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-May-16	D	<5.0	<0.50	<2.0	9.2	<0.50	3,010	0.072	255,000	<0.50	<0.050	0.90	<10	<0.30	118	828,000	2.57	8.0	<0.50	<2.0	7,190,000	<0.050	<5.0	2.16	1.16	5.7
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-May-16	T	122	<0.50	<2.0	9.0	<0.50	2,940	0.068	262,000	<0.50	0.122	1.06	171	<0.30	117	857,000	7.72	7.5	<0.50	<2.0	7,440,000	<0.050	6.3	2.25	1.52	3.4
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.0	<0.50	3,460	0.058	261,000	<0.50	<0.050	0.63	<10	<0.30	131	836,000	3.01	8.3	<0.50	<2.0	7,360,000	<0.050	<5.0	2.56	1.28	<3.0
DUP-7 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	8.3	<0.50	3,190	0.056	266,000	<0.50	<0.050	0.74	<10	<0.30	124	856,000	2.79	7.4	<0.50	<2.0	7,530,000	<0.050	<5.0	2.29	1.18	<3.0
QA/QC RPD										Duplicates	D	---	---	---	8%	---	8%	4%	2%	---	---	---	---	---	5%	2%	8%	11%	---	---	2%	---	---	11%	8%	---
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	T	7.8	<0.50	<2.0	9.0	<0.50	3,510	0.051	287,000	<0.50	0.055	0.52	13	<0.30	126	877,000	3.34	8.3	<0.50	<2.0	7,700,000	<0.050	<5.0	2.46	1.18	<3.0
DUP-7 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	18-Aug-16	T	23.9	<0.50	<2.0	9.0	<0.50	3,390	0.056	288,000	<0.50	<0.050	0.62	15	<0.30	133	856,000	3.56	7.9	<0.50	<2.0	7,730,000	<0.050	<5.0	2.46	1.30	<3.0
QA/QC RPD										Duplicates	T	---	---	---	0%	---	3%	9%	0%	---	---	---	---	---	5%	2%	6%	5%	---	---	0%	---	---	0%	10%	---
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	24-Nov-16	D	14.5	<0.50	<2.0	8.2	<0.50	3,150	0.055	263,000	<0.50	<0.050	0.55	<10	<0.30	127	828,000	3.51	7.4	<0.50	<2.0	7,670,000	<0.050	<5.0	2.08	0.99	3.1
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	24-Nov-16	T	44.1	<0.50	<2.0	8.3	<0.50	3,210	0.066	268,000	<0.50	<0.050	0.62	39	<0.30	132	842,000	4.08	7.5	<0.50	<2.0	7,290,000	<0.050	<5.0	2.18	1.08	4.7
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Mar-17	D	16.0	<0.50	<2.0	11.2	<0.50	2,650	<0.050	238,000	<0.50	<0.050	<0.50	<10	<0.30	110	773,000	3.13	8.2	<0.50	<2.0	6,150,000	<0.050	<5.0	2.10	1.01	5.1
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	14-Mar-17	T	45.6	<0.50	<2.0	8.4	<0.50	2,720	<0.050	239,000	<0.50	<0.050	<0.50	44	<0.30	116	763,000	4.10	7.3	<0.50	<2.0	6,260,000	<0.050	<5.0	2.14	1.05	12.6
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Jun-17	D	6.5	<0.50	<2.0	10.0	<0.50	2,270	<0.050	216,000	<0.50	<0.050	0.94	<10	<0.30	99	656,000	4.59	6.0	<0.50	<2.0	6,050,000	<0.050	<5.0	1.92	0.75	<3.0
P8-12-O	Surface Water	P8-12	NA	EB	SW	SW	SW	---	---	9-Jun-17	T	51.9	<0.50	<2.0	11.6	<0.50	2,530	<0.050	207,000	<0.50	<0.050	0.92	85	<0.30	103	631,000	7.25	6.6	<0.50	<2.0	5,370,000	<0.050	<5.0	1.98	0.93	3.4
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	D	9.9 J	<0.50	<2.0	9.0	<0.50	3,100	0.078 J	298,000	<0.50	<0.050	0.74	<10	<0.30	123	891,000	2.63	7.2	<0.50	<2.0	7,590,000	<0.050	<5.0	1.98	1.25	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	8-Dec-11	T	33.2	<0.50	<2.0	8.8	<0.50	3,100	0.065 J	290,000	<0.50	<0.050	0.79	42	<0.30	128	876,000	4.07	7.3	<0.50	<2.0	7,430,000	<0.050	<5.0	1.95	1.36	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	13-Mar-12	D	14.8	<0.50	<2.0	9.0	<0.50	3,730	0.092	295,000	<0.10	<0.050	14.4	<10	<0.30	138	881,000	3.14	8.3	<0.50	<2.0	7,820,000	<0.050	<5.0	2.36	1.23	7.4
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	D	20.0	<0.50	<2.0	6.1	<0.50	2,470	0.076	197,000	<0.50	<0.050	1.12	<10	<0.30	96	655,000	1.81	5.7	<0.50	<2.0	5,040,000	<0.050	<5.0	1.70	0.96	4.6
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	11-Jun-12	T	32.1	<0.50	<2.0	6.7	<0.50	2,480	0.124	199,000	<0.50	<0.050	0.64	28	0.72	95	652,000	2.84	6.0	<0.50	<2.0	5,050,000	<0.050	<5.0	1.76	0.97	3.1
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.8	<0.50	3,760	0.102	272,000	<0.50	<0.050	0.89	<10	<0.30	140	898,000	3.97	8.2	0.58	<2.0	7,530,000	<0.050	<5.0	2.33	1.26	3.7
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	18-Sep-12	T	177	<0.50	<2.0	10.3	<0.50	3,760	0.087	279,000	<0.50	0.136	1.6	273	0.55	140	928,000	10.30	8.2	0.82	<2.0	7,670,000	<0.050	7.4	2.34	1.92	3.9
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	D	22.4	<0.50	<2.0	7.5	<0.50	2,040	<0.050	185,000	<0.50	<0.050	0.88	<10	<0.30	79	572,000	3.39	5	<0.50	<2.0	5,110,000	<0.050	<5.0	1.41	0.8	3.4
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-12	T	52	<0.50	<2.0	7.3	<0.50	2,090	<0.050	184,000	<0.50	<0.050	1.19	45	<0.30	83	586,000	4.42	5.2	<0.50	<2.0	5,080,000	<0.050	<5.0	1.44	0.84	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	8.8	<0.50	3,250	<0.050	305,000	<0.50	0.142	<0.50	<10	<0.30	120	913,000	4.17	7.5	<0.50	<2.0	8,200,000	<0.050	<5.0	1.99	1.00	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Jan-13	T	106	<0.50	<2.0	9.5	<0.50	3,380	<0.050	302,000	<0.50	0.083	1.03	143	1.83	121	912,000	7.37	7.9	0.54	<2.0	8,070,000	<0.050	5.9	2.05	1.34	3.6
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	D	10.8	<0.50	<2.0	8.2	<0.50	3,480	<0.050	248,000	<0.50	<0.050	0.67	<10	<0.30	125	745,000	3.90	8.0	<0.50	<2.0	6,710,000	<0.050	<5.0	2.02	1.10	3.7
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	11-Mar-13	T	66.4	<0.50	<2.0	8.1	<0.50	3,450	<0.050	245,000	<0.50	0.077	0.96	98	<0.30	125	736,000	6.18	7.7	<0.50	<2.0	6,630,000	<0.050	<5.0	1.99	1.31	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	D	9.2	<0.50	<2.0	10.1	<0.50	2,790	<0.050	210,000	<0.50	0.088	1.18	<10	<0.30	130	693,000	3.02	7.1	0.61	<2.0	5,520,000	<0.050	<5.0	1.98	1.12	5.9
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	T	1,160	<0.50	<3.0	15.0	<0.50	2,790	0.068	221,000	1.86	0.625	4.39	1,380	1.97	135	704,000	64.9	6.6	1.83	<2.0	5,750,000	<0.050	47.1	2.11	4.70	10.3
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	10.5	<0.50	3,390	<0.050	290,000	<0.50	<0.050 UJ	<0.50 UJ	<10	<0.30	127	938,000	2.73	8.3	<0.50 UJ	<2.0	7,590,000	<0.050	<5.0	2.28	1.17	<3.0 UJ
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	T	11.4 J	<0.50	<2.0	10.6	<0.50	3,410	<0.050	302,000	<0.50	<0.050	0.59	17 J	<0.30	126	962,000	3.21	8.4	<0.50	<2.0	7,700,000	<0.050	<5.0	2.26	1.22	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.5	<0.50	3,450	<0.050	302,000	<0.50	<0.050	0.54	<10	<0.30	135	918,000	2.99	8.4	<0.50	<2.0	7,790,000	<0.050	<5.0	2.31	1.31	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Dec-13	T	123	<0.50	<2.0	10.6	<0.50	3,480	<0.050	301,000	<0.50	0.069	1.16	208	<0.30	136	904,000	6.00	8.5	0.73	<2.0	7,690,000	<0.050	5.4	2.40	1.78	3.7
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	D	19.6	<0.50	<2.0	8.4	<0.50	2,800	<0.050	202,000	<0.50	0.072	0.61	<10	<0.30	105	645,000	5.12	6.7	<0.50	<2.0	5,360,000	<0.050	<5.0	1.64	0.92	3.1
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-14	T	109	<0.50	<2.0	8.2	<0.50	2,780	<0.050	205,000	<0.50	0.070	0.86	118	<0.30	104	647,000	9.33	6.6	<0.50	<2.0	5,380,000	<0.050	<5.0	1.68	1.20	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	D	5.9	<0.50	<2.0	10.9	<0.50	3,430	<0.050	247,000	<0.50	<0.050	1.32	<10	<0.30	132	764,000	2.32	7.6	<0.50	<2.0	6,800,000	<0.050	<5.0	2.05	1.26	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	13-Jun-14	T	61.3	<0.50	<2.0	11.3	<0.50	3,470	<0.050	253,000	<0.50	0.078	0.98	77	<0.30	137	787,000	6.94	7.8	<0.50	<2.0	6,920,000	<0.050	<5.0	2.02	1.46	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.9	<0.50	3,930	<0.050	320,000	<0.50	0.054	0.78	<10	<0.30	156	934,000	3.96	8.2	0.53	<2.0	8,550,000	<0.050	<5.0	2.55	1.39	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	12-Sep-14	T	66.1	<0.50	<2.0	10.4	<0.50	3,930	<0.050	309,000	<0.50	0.085	0.68	111	<0.30	152	954,000	6.41	8.0	<0.50	<2.0	8,340,000	<0.050	<5.0	2.52	1.60	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	D	7.8	<0.50	<2.0	11.0	<0.50	4,000	0.092	300,000	<0.50	<0.050	1.03	<10	<0.30	96	907,000	2.20	8.4	0.52	<2.0	7,800,000	<0.050	<5.0	2.33	1.17	6.6
DUP-3 (P8-12-NBO)	Surface water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	D	6.0	<0.50	<2.0	10.1	<0.50	3,950	0.113	302,000	<0.50	<0.050	<0.50	<10	<0.30	100	916,000	2.29	8.0	<0.50	<2.0	7,750,000	<0.050	<5.0	2.25	1.25	<3e010(L158
QA/QC RPD										Duplicates	D	26%	---	---	9%	---	1%	20%	1%	---	---	---	---	---	4%	1%	4%	5%	---	---	1%	---	---	3%	7%	---
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	T	29.8	<0.50	<2.0	9.7	<0.50	3,970	0.067	303,000	<0.50	<0.050	0.90	46	<0.30	101	912,000	3.33	8.9	<0.50	<2.0	7,800,000	<0.050	<5.0	2.36	1.35	<3.0
DUP-3 (P8-12-NBO)	Surface water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Mar-15	T	29.5	<0.50	<2.0	9.9	<0.50	4,120	0.105	308,000	<0.50	<0.050	0.55	40	<0.30	97	923,000	3.23	8.5	<0.50	<2.0	7,930,000	<0.050	<5.0	2.38	1.27	<3.0
QA/QC RPD										Duplicates	T	1%	---	---	2%	---	4%	44%	2%	---	---	---	---	---	4%	1%	3%	5%	---	---	2%	---	---	1%	6%	---
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	D	<5.0	<0.50	<2.0	10.6	<0.50	3,230	<0.050	286,000	<0.50	<0.050	0.84	<10	<0.30	92	863,000	3.72	7.2	1.49	<2.0	7,260,000	<0.050	<5.0	1.99	1.16	13.9
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	17-Jun-15	T	184	<0.50	<2.0	10.9	<0.50	3,220	<0.050	297,000	<0.50	0.099	0.98	243	<0.30	89	867,000	6.84	7.0	0.57	<2.0	7,620,000	<0.050	11.5	1.96	1.63	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	D	<5.0	<0.50	<2.0	9.5	<0.50	3,240	<0.050	301,000	<0.50	<0.050	0.90	<10	<0.30	122	883,000	2.93	7.6	<0.50	<2.0	7,740,000	<0.050	<5.0	2.18	1.21	6.4
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Sep-15	T	20.4	<0.50	<2.0	10.3	<0.50	3,600	<0.050	316,000	<0.50	<0.050	0.58	25	<0.30	124	934,000	4.49	8.6	<0.50	<2.0	8,200,000	<0.050	<5.0	2.37	1.38	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	D	32.6	<0.50	<2.0	7.1	<0.50	1,980	<0.050	144,000	<0.50	<0.050	<0.50	<10	<0.30	77	448,000	3.46	4.1	<0.50	<2.0	3,740,000	<0.050	<5.0	1.15	0.79	19.6
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	10-Dec-15	T	154	<0.50	<2.0	7.6	<0.50	1,990	0.052	151,000	<0.50	0.066	0.58	140	<0.30	81	465,000	7.01	4.2	<0.50	<2.0	3,870,000	<0.050	6.2	1.10	1.12	3.8
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	D	21.6	<0.50	<2.0	9.6	<0.50	2,860	<0.050	226,000	<0.50	0.184	0.64	<10	<0.30	107	728,000	3.74	7.0	0.75	<2.0	6,270,000	<0.050	<5.0	1.90	1.01	7.3
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	26-Feb-16	T	42.2	<0.50	<2.0	9.3	<0.50	2,850	<0.050	233,000	<0.50	<0.050	<0.50	35	<0.30	115	748,000	4.49	7.0	<0.50	<2.0	6,440,000	<0.050	<5.0	2.00	1.11	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-May-16	D	<5.0	<0.50	<2.0	8.4	<0.50	2,980	0.054	260,000	<0.50	<0.050	0.88	<10	<0.30	121	842,000	2.71	7.7	<0.50	<2.0	7,400,000	<0.050	<5.0	2.25	1.12	3.5
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-May-16	T	758	<0.50	<2.0	12.3	<0.50	2,980	0.079	255,000	1.02	0.442	3.07	1,090	1.07	119	825,000	25.5	7.3	1.36	<2.0	7,250,000	<0.050	36.7	2.25	3.31	7.9
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	D	<5.0	<0.50	<2.0	9.3	<0.50	3,480	0.054	266,000	0.54	<0.050	0.60	<10	<0.30	130	861,000	3.01	8.2	<0.50	<2.0	7,480,000	<0.050	<5.0	2.43	1.23	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	18-Aug-16	T	28.9	<0.50	<2.0	9.5	<0.50	3,490	0.075	295,000	<0.50	<0.050	0.95	40.0	<0.30	127	899,000	4.16	8.2	<0.50	<2.0	7,740,000	<0.050	<5.0	2.46	1.22	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	D	21.4	<0.50	<2.0	8.9	<0.50	3,070	0.076	250,000	<0.50	<0.050	0.83	15	<0.30	124	794,000	3.46	7.7	<0.50	<2.0	7,200,000	<0.050	<5.0	2.12	1.23	3.4
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	24-Nov-16	T	145	<0.50	<2.0	8.6	<0.50	3,090	0.065	255,000	<0.50	0.073	1.03	171	<0.30	126	798,000	8.48	7.2	<0.50	<2.0	7,060,000	<0.050	6.6	2.15	1.65	5.9
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	D	16.8	<0.50	<2.0	12.5	<0.50	2,630	<0.050	238,000	<0.50	<0.050	0.58	<10	<0.30	111	749,000	3.02	7.0	<0.50	<2.0	6,110,000	<0.050	<5.0	2.08	1.04	3.8
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	14-Mar-17	T	41.7	<0.50	<2.0	8.1	<0.50	2,720	<0.050	242,000	<0.50	<0.050	0.56	38	<0.30	115	785,000	3.91	7.5	<0.50	<2.0	6,370,000	<0.050	<5.0	2.15	1.07	8.3
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	D	6.9	<0.50	<2.0	10.4	<0.50	2,400	<0.050	215,000	<0.50	<0.050	0.53	<10	<0.30	98	672,000	4.36	6.4	<0.50	<2.0	5,980,000	<0.050	<5.0	1.90	0.82	<3.0
P8-12-NBO	Surface Water	P8-12	NA	EB	NBO	NBO	NBO	---	---	9-Jun-17	T	35.6	<0.50	<2.0	10.6	<0.50	2,190	<0.050	203,000	<0.50	<0.050	0.58	55	<0.30	91	625,000	6.22	5.8	<0.50	<2.0	5,260,000	<0.050	<5.0	1.74	0.86	<3.0
P14C-SW	Surface Run-off	P14C	NA	CL	SW	SW	SW	---	---	18-Dec-12	D	11.0	0.335	0.391	31.0	0.0956	33.2	0.704	49,200	<0.50	20.9	12.1	<30	<0.050	1.66	8,490	1,110	0.406	18	<0.20	32,700	0.0389	<0.20	0.0107	0.324	101
P14C-SW	Surface Run-off	P14C	NA	CL	SW	SW	SW	---	---	18-Dec-12	T	739	0.331	0.586	30.8	0.341	<35	0.657	48,600	<0.50	19.0	20.4	327	0.399	1.81	8,390	1,020	0.392	16.2	0.21	32,700	0.0373	0.61	0.0234	0.779	87.1
PEC-SW	Surface Run-off	PEC	NA	RL	SW	SW	SW	---	---	18-Dec-12	D	5.8	0.077	0.325	42.8	0.0119	47.1	0.0614	14,800	<0.50	0.377	2.58	<30	0.050	0.34	3,000	50.2	0.396	1.52	<0.20	62,800	0.0049	<0.20	<0.0020	0.222	13.9
PEC-SW	Surface Run-off	PEC	NA	RL	SW	SW	SW	---	---	18-Dec-12	T	29.3	0.091	0.418	44.1	0.0167	54.8	0.0640	15,000	<0.50	0.447	3.29	223	0.303	0.38	3,100	57.4	0.405	1.30	<0.20	65,400	0.0047	0.68	0.0036	0.352	15.1
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	13-Mar-12	D	12.1	<0.50	<2.0	10.6	<0.50	3,960	0.087	314,000	<0.10	<0.050	1.19	<10	<0.30	151	965,000	3.39	8.8	0.51	<2.0	7,940,000	<0.050	<5.0	2.52	1.25	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	6-Jun-12	D	11.9	<0.50	<2.0	7.1	<0.50	2,740	0.108	231,000	<0.50	<0.050	0.68	<10	<0.30	109	761,000	1.93	6.6	<0.50	<2.0	6,410,000	0.056	<5.0	1.95	1.08	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.9	<0.50	3,920	0.087	329,000	<0.50	<0.050	0.7	<10	<0.30	147	957,000	3.93	8.7	<0.50	<2.0	8,710,000	<0.050	<5.0	2.41	1.3	3.1
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	18-Sep-12	T	18.7	<0.50	<2.0	9.5	<0.50	3,970	0.094	337,000	<0.50	<0.050	0.61	27	<0.30	152	1,010,000	4.72	8.9	<0.50	<2.0	9,090,000	<0.050	<5.0	2.52	1.5	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	13-Nov-12	D	20.4	<0.50	<2.0	8.5	<0.50	2,920	0.098	220,000	<0.50	<0.050	0.93	<10	<0.30	116	766,000	4.31	7.0	<0.50	<2.0	5,350,000	<0.050	<5.0	1.81	1.15	3.3
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	13-Nov-12	T	30.0	<0.50	<2.0	8.1	<0.50	2,880	0.095	222,000	<0.50	<0.050	0.96	19	<0.30	117	728,000	4.71	6.8	<0.50	<2.0	5,440,000	<0.050	<5.0	1.78	1.09	3.9
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	10-Dec-12	D	24.5	<0.50	<2.0	7.6	<0.50	2,410	<0.050	181,000	<0.50	<0.050	0.62	<10	<0.30	78	565,000	3.10	5.5	<0.50	<2.0	5,020,000	<0.050	<5.0	1.44	0.76	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	10-Dec-12	T	52.8	<0.50	<2.0	8.2	<0.50	2,620	<0.050	195,000	<0.50	<0.050	0.82	30 J	<0.30	88	606,000	3.95	6.2	<0.50	<2.0	5,410,000	<0.050	<5.0	1.61	1.00	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	8.7	<0.50	3,460	<0.050	298,000	<0.50	0.202	0.61	<10	<0.30	127	904,000	3.68	8.2	<0.50	<2.0	7,990,000	<0.050	<5.0	2.10	1.10	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	9-Jan-13	T	25.1	<0.50	<2.0	8.9	<0.50	3,510	<0.050	294,000	<0.50	<0.050	0.86	30	<0.30	127	903,000	4.05	8.1	<0.50	<2.0	7,920,000	<0.050	<5.0	2.14	1.20	3.7
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	11-Mar-13	D	11.8	<0.50	<2.0	8.4	<0.50	3,340	0.052	250,000	<0.50	0.097	0.97	<10	<0.30	121	746,000	4.09	7.7	0.53	<2.0	6,770,000	<0.050	<5.0	1.93	1.07	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	11-Mar-13	T	61.9	<0.50	<2.0	7.9	<0.50	3,320	<0.050	236,000	<0.50	<0.050	0.65	22	<0.30	117	711,000	4.53	7.2	<0.50	<2.0	6,360,000	<0.050	<5.0	1.88	1.05	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	24-Jun-13	D	9.7	<0.50	<2.0	11.9	<0.50	2,750	<0.050	201,000	<0.50	0.075	1.20	<10	<0.30	133	667,000	4.51	6.9	0.67	<2.0	5,500,000	<0.050	<5.0	1.87	1.05	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	24-Jun-13	T	315	<0.50	<3.0	13.6	<0.50	2,750	<0.050	208,000	0.74	0.200	2.36	368	0.68	128	700,000	14.0	6.8	1.12	<2.0	5,730,000	<0.050	13.7	1.82	1.89	4.2
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.1	<0.50	3,630	<0.050	332,000	<0.50	0.122	0.89	<10	<0.30	130	1,010,000	3.32	8.8	0.69	<2.0	8,290,000	<0.050	<5.0	2.43	1.34	3.2
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	20-Sep-13	T	45.1	<0.50	<2.0	10.4	<0.50	3,570	<0.050	316,000	<0.50	<0.050	0.62	41	<0.30	127	986,000	4.21	8.0	<0.50	<2.0	8,030,000	<0.050	<5.0	2.42	1.37	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	9-Dec-13	D	<5.0	<0.50	<2.0	9.2	<0.50	3,510	0.067	304,000	<0.50	<0.050	<0.50	<10	<0.30	135	918,000	3.29	8.6	<0.50	<2.0	7,850,000	<0.050	<5.0	2.32	1.27	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	9-Dec-13	T	26.6	<0.50	<2.0	10.0	<0.50	3,570	<0.050	292,000	<0.50	<0.050	0.50	41	<0.30	137	880,000	3.93	8.6	<0.50	<2.0	7,590,000	<0.050	<5.0	2.37	1.41	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	14-Mar-14	D	24.0	<0.50	<2.0	8.1	<0.50	2,670	<0.050	196,000	<0.50	0.077 J	0.69	<10 UJ	<0.30	99	626,000	5.72	6.3	<0.50	<2.0	5,220,000	<0.050	<5.0	1.58	0.86 J	3.9 J
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	14-Mar-14	T	39.8	<0.50	<2.0	7.8	<0.50	2,680	<0.050	194,000	<0.50	<0.050	0.52	26	<0.30	102	628,000	6.41	6.3	<0.50	<2.0	5,200,000	<0.050	<5.0	1.60	0.96	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	13-Jun-14	D	7.3	<0.50	<2.0	10.3	<0.50	3,420	<0.050	248,000	<0.50	0.095	0.90	11	<0.30	133	775,000	2.90	7.9	0.72	<2.0	6,740,000	<0.050	<5.0	2.06	1.23	3.1
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	13-Jun-14	T	20.3	<0.50	<2.0	9.9	<0.50	3,370	<0.050	247,000	<0.50	<0.050	0.88 J	26	<0.30	130	769,000	4.82	7.6	0.56	<2.0	6,470,000	<0.050	<5.0	1.90	1.25	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.4	<0.50	3,610	<0.050	320,000	<0.50	<0.050	0.77	<10	<0.30	143	955,000	3.44	7.3	0.55	<2.0	8,620,000	<0.050	<5.0	2.47	1.32	<3.0
PR2-3-O	Surface Water	PR2-3	NA	RL	SW	SW	SW	---	---	12-Sep-14	T	37.3	<0.50	<2.0	10.5	<0.50	3,750	<0.050	314,000	<0.50	0.058	0.65	53	<0.30	150	949,000	4.48	8.1	<0.50	<2.0	8,500,000	<0.050	<5.0	2.52	1.44	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	D	12.5	<0.50	<2.0	11.3	<0.50	3,740	0.089	301,000	<0.10	<0.050	1.50	<10	<0.30	141	896,000	3.30	8.3	0.53	<2.0	7,840,000	<0.050	<5.0	2.37	1.38	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	6-Jun-12	D	15.9	<0.50	<2.0	7.7	<0.50	2,690	0.134	214,000	<0.50	0.059	1.12	<10	<0.30	102	697,000	1.91	6.6	<0.50	<2.0	5,970,000	0.054	<5.0	1.91	0.98	7.7
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10.3	<0.50	3,750	0.089	280,000	<0.50	<0.050	0.73	<10	<0.30	140	893,000	3.72	8.3	0.59	<2.0	7,760,000	<0.050	<5.0	2.34	1.29	3.9
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	T	30.3	<0.50	<2.0	10.1	<0.50	3,860	0.083	275,000	<0.50	0.051	0.8	50	<0.30	143	901,000	4.79	8.5	0.58	<2.0	7,460,000	<0.050	<5.0	2.42	1.39	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	D	19.5	<0.50	<2.0	10.1	<0.50	2,780	0.112	233,000	<0.50	<0.050	0.91	<10	<0.30	112	763,000	4.42	6.6	0.66	<2.0	5,960,000	<0.050	<5.0	1.73	1.02	3.2
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	T	29.9	<0.50	<2.0	9.9	<0.50	2,780	0.113	222,000	<0.50	<0.050	1.16	20	<0.30	112	747,000	4.62	6.5	0.66	<2.0	5,510,000	<0.050	<5.0	1.67	1.01	5.1
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	D	24.8	<0.50	<2.0	8.3	<0.50	1,930	<0.050	179,000	<0.50	<0.050	1.16	<10	<0.30	77	556,000	4.16	4.7	0.68	<2.0	4,940,000	<0.050	<5.0	1.33	0.82	4.9
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	T	38.6	<0.50	<2.0	9.4	<0.50	1,810	<0.050	177,000	<0.50	<0.050	2.19	23	<0.30	74	542,000	4.61	4.6	0.62	<2.0	4,840,000	<0.050	<5.0	1.24	0.68	3.8
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	10.3	<0.50	3,870	<0.050	294,000	<0.50	0.201	0.56	18	<0.30	139	892,000	3.88	9.0	<0.50	<2.0	7,790,000	<0.050	<5.0	2.36	1.23	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	T	68.1	<0.50	<2.0	9.2	<0.50	3,440	<0.050	293,000	<0.50	<0.050	1.16	70	<0.30	122	893,000	4.42	7.9	<0.50	<2.0	7,790,000	<0.050	<5.0	2.05	1.25	3.1
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	D	9.3	<0.50	<2.0	8.3	<0.50	3,440	<0.050	249,000	<0.50	<0.050	0.59	<10	<0.30	123	752,000	4.06	7.7	<0.50	<2.0	6,700,000	<0.050	<5.0	1.96	1.09	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	T	15.1	<0.50	<2.0	8.2	<0.50	3,460	<0.050	249,000	<0.50	<0.050	0.54	11	<0.30	123	754,000	4.25	7.9	<0.50	<2.0	6,710,000	<0.050	<5.0	1.97	1.17	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	D	7.3	<0.50	<2.0	9.5	<0.50	2,480	0.069	200,000	<0.50	0.088	0.94	<10	<0.30	121	661,000	2.58	6.3	<0.50	<2.0	4,830,000	<0.050	<5.0	1.73	1.07	4.1
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	T	37.4	<0.50	<3.0	9.8	<0.50	2,660	<0.050	211,000	0.75	<0.050	1.46	39	<0.30	134	694,000	4.49	6.7	0.51	<2.0	5,210,000	<0.050	<5.0	1.80	1.13	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.5	<0.50	3,310	<0.050	307,000	<0.50	0.128	1.07	<10	<0.30	118	943,000	2.47	7.9	<0.50	<2.0	7,730,000	<0.050	<5.0	2.21	1.32	3.3
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	T	7.5	<0.50	<2.0	10.1	<0.50	3,330	<0.050	298,000	<0.50	<0.050	0.57	12	<0.30	120	936,000	2.94	7.8	<0.50	<2.0	7,590,000	<0.050	<5.0	2.12	1.19	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	9.9	<0.50	3,600	<0.050	309,000	<0.50	<0.050	0.51	<10	<0.30	135	948,000	3.09	11.9	<0.50	<2.0	8,790,000	<0.050	<5.0	2.65	1.42	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	T	12.6	<0.50	<2.0	9.8	<0.50	3,540	<0.050	313,000	<0.50	<0.050	0.51	22	<0.30	135	960,000	3.54	11.9	<0.50	<2.0	8,870,000	<0.050	<5.0	2.61	1.61	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	D	23.6	<0.50	<2.0	8.3	<0.50	2,660	<0.050	200,000	<0.50	0.073	0.88	<10	<0.30	97	635,000	5.65	6.1	<0.50	<2.0	5,250,000	<0.050	<5.0	1.56	0.92	3.1
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	T	44.7	<0.50	<2.0	7.9	<0.50	2,670	<0.050	191,000	<0.50	<0.050	0.59	29	<0.30	98	608,000	6.72	6.2	<0.50	<2.0	4,990,000	<0.050	<5.0	1.55	0.97	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	11.5	<0.50	3,730	<0.050	321,000	<0.50	<0.050	0.64	<10	<0.30	148	955,000	3.43	7.8	0.66	<2.0	8,610,000	<0.050	<5.0	2.49	1.30	<3.0
PR2-3-NBO	Surface Water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	T	29.6	<0.50	<2.0	10.4	<0.50	3,910	<0.050	307,000	<0.50	<0.050	0.56	50.0	<0.30	152	950,000	4.63	8.4	<0.50	<2.0	8,350,000	<0.050	<5.0	2.52	1.51	<3.0

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
PR2-8-O	Surface Water	PR2-8	NA	RL	SW	SW	SW	---	---	8-Dec-11	D	18.7 J	<0.50	<2.0	8.7	<0.50	3,170	0.071 J	284,000	<0.50	<0.050	0.57	<10	<0.30	130	837,000	4.50	7.6	<0.50	<2.0	7,250,000	<0.050	<5.0	2.04	1.25	<3.0 J
PR2-8-O	Surface Water	PR2-8	NA	RL	SW	SW	SW	---	---	8-Dec-11	T	21.0	<0.50	<2.0	8.7	<0.50	3,060	0.068 J	285,000	<0.50	<0.050	0.78	14	<0.30	125	867,000	7.13	7.6	<0.50	<2.0	7,320,000	<0.050	<5.0	1.96	1.28	<3.0
PR2-8-NBO	Surface Water	PR2-8	NA	RL	NBO	NBO	NBO	---	---	8-Dec-11	D	14.1 J	<0.50	<2.0	8.5	<0.50	2,930	0.051 J	254,000	<0.50	<0.050	0.64	<10	<0.30	112	815,000	2.93	6.7	<0.50	<2.0	6,800,000	<0.050	<5.0	1.89	1.18	<3.0
PR2-8-NBO	Surface Water	PR2-8	NA	RL	NBO	NBO	NBO	---	---	8-Dec-11	T	19.8	<0.50	<2.0	8.6	<0.50	2,780	0.053 J	257,000	<0.50	<0.050	0.68	12	<0.30	115	814,000	3.54	6.7	<0.50	<2.0	6,930,000	<0.050	<5.0	1.88	1.24	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	8-Dec-11	D	12.5 J	<0.50	<2.0	8.7	<0.50	3,190	0.067 J	297,000	<0.50	<0.050	0.57	<10	<0.30	127	885,000	3.41	7.2	<0.50	<2.0	7,700,000	<0.050	<5.0	2.07	1.29	3.6
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	8-Dec-11	T	25.9	<0.50	<2.0	9.3	<0.50	3,220	0.060 J	298,000	<0.50	<0.050	0.61	19	<0.30	125	915,000	4.10	7.4	<0.50	<2.0	7,910,000	<0.050	<5.0	2.08	1.28	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	13-Mar-12	D	12.0	<0.50	<2.0	10.3	<0.50	3,670	0.105	290,000	<0.10	<0.050	0.51	<10	<0.30	143	877,000	4.04	8.1	0.64	<2.0	7,360,000	<0.050	<5.0	2.37	1.23	8.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	11-Jun-12	D	25.3	<0.50	<2.0	5.0	<0.50	2,290	0.089	179,000	<0.50	<0.050	0.98	<10	<0.30	87	587,000	1.70	5.2	0.55	<2.0	4,480,000	<0.050	<5.0	1.59	0.88	5.1
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	11-Jun-12	T	33.8	<0.50	<2.0	5.8	<0.50	2,150	0.065	177,000	0.76	<0.050	0.77	17	<0.30	80	591,000	2.12	5.0	<0.50	<2.0	4,450,000	<0.050	<5.0	1.49	0.90	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	10	<0.50	3,690	0.084	319,000	<0.50	<0.050	0.99	<10	<0.30	140	951,000	3.77	8.3	0.51	<2.0	8,570,000	<0.050	<5.0	2.35	1.3	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	18-Sep-12	T	39.8	<0.50	<2.0	9.6	<0.50	3,640	0.08	310,000	<0.50	<0.050	0.9	53	<0.30	141	931,000	4.82	8	<0.50	<2.0	8,240,000	<0.050	<5.0	2.29	1.35	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	13-Nov-12	D	21.9	<0.50	<2.0	8.1	<0.50	2,810	0.106	237,000	<0.50	<0.050	0.81	<10	<0.30	112	798,000	4.29	6.6	<0.50	<2.0	6,120,000	<0.050	<5.0	1.75	1.02	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	13-Nov-12	T	33.0	<0.50	<2.0	8.5	<0.50	2,900	0.091	231,000	<0.50	<0.050	0.83	19	<0.30	121	792,000	4.70	6.9	<0.50	<2.0	5,870,000	<0.050	<5.0	1.82	1.07	3.3
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	10-Dec-12	D	26.8	<0.50	<2.0	8.1	<0.50	2,430	<0.050	179,000	<0.50	<0.050	1.19	<10	<0.30	80	574,000	4.29	6.0	<0.50	<2.0	4,940,000	<0.050	<5.0	1.48	0.89	3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	10-Dec-12	T	45.0	<0.50	<2.0	8.3	<0.50	2,570	<0.050	187,000	<0.50	<0.050	0.95	30	<0.30	89	597,000	4.23	6.3	<0.50	<2.0	5,220,000	<0.050	<5.0	1.63	0.95	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	9.0	<0.50	3,290	<0.050	293,000	<0.50	<0.050	<0.50	<10	<0.30	119	885,000	3.12	7.6	<0.50	<2.0	7,790,000	<0.050	<5.0	1.94	0.95	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	9-Jan-13	T	25.8	<0.50	<2.0	8.9	<0.50	3,520	<0.050	301,000	<0.50	<0.050	0.85	35	<0.30	128	910,000	3.94	8.3	<0.50	<2.0	8,000,000	<0.050	<5.0	2.17	1.20	6.1
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	11-Mar-13	D	12.0	<0.50	<2.0	8.3	<0.50	3,270	0.119	237,000	<0.50	0.097	0.92	<10	<0.30	117	722,000	4.21	7.3	<0.50	<2.0	6,430,000	<0.050	<5.0	1.88	1.05	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	11-Mar-13	T	19.3	<0.50	<2.0	7.9	<0.50	3,280	<0.050	239,000	<0.50	<0.050	0.53	15	<0.30	116	727,000	4.47	7.4	<0.50	<2.0	6,460,000	<0.050	<5.0	1.85	1.12	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	24-Jun-13	D	7.9	<0.50	<2.0	10.0	<0.50	2,610	<0.050	211,000	<0.50	0.096	1.16	<10	<0.30	119	689,000	4.52	6.6	0.53	2.0	5,250,000	<0.050	<5.0	1.86	1.18	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	24-Jun-13	T	1,770	<0.50	<2.0	16.1	<0.50	2,620	0.084	222,000	2.69	0.975	6.73	2,140	3.31	127	715,000	50.2	6.5	2.86	2.1	5,470,000	<0.050	79.5	2.02	6.20	12.6
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	12.2	<0.50	3,380	<0.050	300,000	<0.50	0.148	1.32	<10	<0.30	124	921,000	2.86	8.2	0.65	<2.0	7,390,000	<0.050	<5.0	2.29	1.28	6.1
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	20-Sep-13	T	9.7	<0.50	<2.0	10.3	<0.50	3,230	<0.050	298,000	<0.50	<0.050	0.56	10	<0.30	121	936,000	2.97	7.6	<0.50	<2.0	7,450,000	<0.050	<5.0	2.20	1.23	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	10.1	<0.50	3,500	<0.050	309,000	<0.50	0.060	0.72	<10	<0.30	133	935,000	3.81	12.2	<0.50	<2.0	8,670,000	<0.050	<5.0	2.60	1.38	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	10-Dec-13	T	10.3	<0.50	<2.0	9.8	<0.50	3,490	<0.050	305,000	<0.50	<0.050	0.60	20	<0.30	131	957,000	16.9	11.8	<0.50	<2.0	8,620,000	<0.050	<5.0	2.53	1.35	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	14-Mar-14	D	21.9	<0.50	<2.0	8.5	<0.50	2,730	<0.050	200,000	<0.50	0.081 J	0.70	<10	<0.30	102	627,000	7.30 J	6.7	<0.50	<2.0	5,310,000	<0.050	<5.0	1.64	0.96	3.7 J
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	14-Mar-14	T	57.0	<0.50	<2.0	7.8	<0.50	2,650	<0.050	202,000	<0.50	<0.050	0.63	40.0	<0.30	102	652,000	6.75	6.3	<0.50	<2.0	5,360,000	<0.050	<5.0	1.62	1.07	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	13-Jun-14	D	8.2	<0.50	<2.0	9.4	<0.50	3,260	<0.050	232,000	<0.50	0.106	0.85	<10	<0.30	126	729,000	2.13	7.3	0.68	<2.0	6,160,000	<0.050	<5.0	1.92	1.19	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	13-Jun-14	T	35.2	<0.50	<2.0	9.6	<0.50	3,250	<0.050	236,000	1.40	0.080	0.90	51	<0.30	133	733,000	5.00	7.1	0.75	<2.0	6,190,000	<0.050	<5.0	1.83	1.36	4.8
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	11.6	<0.50	3,840	<0.050	310,000	<0.50	<0.050	0.68	<10	<0.30	157	944,000	3.51	8.1	0.50	<2.0	8,380,000	<0.050	<5.0	2.37	1.29	<3.0
PR2-12-O	Surface Water	PR2-12	NA	RL	SW	SW	SW	---	---	12-Sep-14	T	12.4	<0.50	<2.0	9.9	<0.50	3,740	<0.050	333,000	<0.50	<0.050	<0.50	21	<0.30	152	940,000	3.93	8.1	<0.50	<2.0	9,050,000	<0.050	<5.0	2.38	1.37	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	9-Dec-11	D	13.7	<0.50	<2.0	9.4	<0.50	2,840	0.078	244,000	<0.50	<0.050	0.58	<10	<0.30	115	764,000	8.53	7.5	<0.50	<2.0	6,510,000	<0.050	<5.0	1.96	1.2	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	9-Dec-11	T	61.3	<0.50	<2.0	8.6	<0.50	2,650	0.084 J	258,000	<0.50	0.064	0.9	52	<0.30	107	775,000	10.70	6.6	<0.50	<2.0	7,140,000	<0.050	<5.0	1.98	1.27	5.2
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Mar-12	D	15.9	<0.50	<2.0	9.0	<0.50	3,500	0.077	262,000	<0.10	<0.050	0.78	<10	<0.30	135	812,000	3.29	7.8	<0.50	<2.0	7,050,000	<0.050	<5.0	2.35	1.27	3.2
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	11-Jun-12	D	29.2	<0.50	<2.0	5.1	<0.50	2,110	0.089	178,000	0.77	<0.050	1.30	35	<0.30	80	588,000	1.44	5.1	<0.50	<2.0	4,520,000	<0.050	<5.0	1.47	0.85	5.9
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	11-Jun-12	T	86.6	<0.50	<2.0	6.3	<0.50	2,150	0.069	180,000	1.28	0.066	0.77	82	<0.30	83	591,000	4.81	5.0	0.58	<2.0	4,730,000	<0.050	<5.0	1.47	1.33	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	D	<5.0	<0.50	<2.0	9.8	<0.50	3,620	0.094	270,000	<0.50	<0.050	0.88	<10	<0.30	134	840,000	3.73	8.2	<0.50	<2.0	6,980,000	<0.050	<5.0	2.25	1.26	4.8
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	18-Sep-12	T	23.9	<0.50	<2.0	9.6	<0.50	3,710	0.21	260,000	<0.50	<0.050	0.87	40	<0.30	142	820,000	4.74	8.4	0.53	<2.0	6,770,000	<0.050	<5.0	2.35	1.26	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	D	21.5	<0.50	<2.0	8.2	<0.50	2,920	0.070 J	224,000	<0.50	<0.050	0.76	<10	<0.30	120	762,000	4.30	7.1	<0.50	<2.0	5,750,000	<0.050	<5.0	1.81	1.06	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	T	39.0	<0.50	<2.0	7.7	<0.50	2,780	0.071	224,000	<0.50	<0.050	0.81	30	<0.30	114	761,000	4.88	6.5	<0.50	<2.0	5,720,000	<0.050	<5.0	1.76	1.06	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	D	23.8	<0.50	<2.0	7.1	<0.50	1,830	<0.050	171,000	<0.50	<0.050	0.74	<10	<0.30	72	528,000	3.10	4.6	<0.50	<2.0	4,720,000	<0.050	<5.0	1.26	0.72	3.5
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	10-Dec-12	T	119	<0.50	<2.0	7.1	<0.50	1,780	<0.050	171,000	<0.50	0.052	1.42	120	<0.30	72	521,000	5.55	4.5	<0.50	<2.0	4,680,000	<0.050	<5.0	1.25	0.97	3.2
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	D	6.2	<0.50	<2.0	10.1	<0.50	3,780	<0.050	295,000	<0.50	0.240	0.70	<10	<0.30	137	885,000	4.78	8.8	<0.50	<2.0	7,730,000	<0.050	<5.0	2.28	1.15	3.6
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	9-Jan-13	T	341	<0.50	<2.0	10.9	<0.50	3,680	<0.050	292,000	0.66	0.162	1.74	423	0.45	137	872,000	12.2	8.4	0.66	<2.0	7,740,000	<0.050	20.5	2.24	2.11	5.9
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	D	15.1	<0.50	<2.0	7.4	<0.50	3,000	<0.050	217,000	<0.50	<0.050	0.78	<10	<0.30	107	658,000	4.06	6.6	<0.50	<2.0	5,840,000	<0.050	<5.0	1.66	0.90	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	11-Mar-13	T	23.7	<0.50	<2.0	7.4	<0.50	3,040	<0.050	217,000	<0.50	<0.050	0.57	14	<0.30	107	667,000	4.60	6.8	<0.50	<2.0	5,870,000	<0.050	<5.0	1.70	1.00	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	D	7.1	<0.50	<2.0	10.3	<0.50	2,660	0.056	220,000	<0.50	0.115	1.12	21	<0.30	119	720,000	4.47	6.8	<0.50	<2.0	5,470,000	<0.050	<5.0	1.86	1.23	4.3
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	24-Jun-13	T	2,000	<0.50	<3.0	17.3	<0.50	2,550	0.098	219,000	2.71	1.10	14.5	2,380	3.51	121	700,000	50.4	6.6	2.89	<2.0	5,310,000	<0.050	89.1	2.01	6.48	13.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.0	<0.50	3,170	<0.050	292,000	<0.50	0.122	0.93	<10	<0.30	115	896,000	2.75	7.7	0.68	<2.0	7,900,000	<0.050	<5.0	2.24	1.29	4.6
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	20-Sep-13	T	18.7	<0.50	<2.0	10.2	<0.50	3,230	<0.050	305,000	<0.50	<0.050	<0.50	29	<0.30	116	939,000	3.20	7.7	<0.50	<2.0	7,700,000	<0.050	<5.0	2.21	1.33	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	10.5	<0.50	3,610	<0.050	305,000	<0.50	0.061	1.09	<10	<0.30	136	929,000	3.82	11.5	<0.50	<2.0	8,500,000	<0.050	<5.0	2.66	1.37	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	T	34.8	<0.50	<2.0	10.3	<0.50	3,480	<0.050	325,000	<0.50	<0.050	0.68	56	<0.30	138	991,000	6.78	11.0	<0.50	<2.0	9,060,000	<0.050	<5.0	2.66	1.60	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	D	21.4	<0.50	<2.0	8.0	<0.50	2,700	<0.050	200,000	<0.50	0.080	0.81	<10	<0.30	101	641,000	5.57	6.4	<0.50	<2.0	5,280,000	<0.050	<5.0	1.63	0.91	3.2
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	14-Mar-14	T	45.1	<0.50	<2.0	7.9	<0.50	2,820	<0.050	198,000	<0.50	<0.050	0.58	33	<0.30	103	626,000	6.58	6.6	<0.50	<2.0	5,220,000	<0.050	<5.0	1.61	1.01	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	D	5.8	<0.50	<2.0	9.0	<0.50	3,210	<0.050	227,000	<0.50	0.087	1.57	<10	<0.30	126	701,000	2.01	7.4	<0.50	<2.0	6,100,000	<0.050	<5.0	1.89	1.11	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Jun-14	T	23.0	<0.50	<2.0	8.8	<0.50	3,240	<0.050	231,000	<0.50	<0.050	0.87	23	<0.30	130	731,000	4.36	7.4	<0.50	<2.0	6,210,000	<0.050	<5.0	1.75	1.22	4.6
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.5	<0.50	3,680	<0.050	319,000	<0.50	<0.050	0.96	<10	<0.30	145	911,000	3.44	8.1	0.51	<2.0	8,570,000	<0.050	<5.0	2.42	1.49	<3.0
PR2-12-NBO	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	12-Sep-14	T	27.1	<0.50	<2.0	9.8	<0.50	3,670	<0.050	305,000	<0.50	0.063	0.60	43	<0.30	147	929,000	4.38	8.2	<0.50	<2.0	8,150,000	<0.050	<5.0	2.33	1.48	<3.0
RAC-SW	Surface Run-off	RAC	NA	RL	SW	SW	SW	---	---	18-Dec-12	D	5.9	0.155	0.326	51.1	0.0052	42.5	0.0815	26,400	<0.50	0.078	8.46	<30	<0.050	0.28	6,470	22.2	0.236	3.22	<0.20	81,900	0.0041	<0.20	0.0050	0.875	34.8
RAC-SW	Surface Run-off	RAC	NA	RL	SW	SW	SW	---	---	18-Dec-12	T	33.7	0.169	0.459	53.1	0.0090	46.4	0.0850	26,300	<0.50	0.092	9.60	85	0.271	0.36	6,570	23.5	0.249	3.31	<0.20	83,100	0.0034	0.88	0.0060	1.00	36.2
Tidal Cycle Sampling																																				
P5-3D-A	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	D	<5.0	<0.50	<2.0	37.0	<0.50	330	<0.050	35,400	<0.50	3.80	<0.50	86	<0.30	<20	61,300	2,210	<2.0	2.41	<2.0	572,000	<0.050	<5.0	0.113	<0.50	517
P5-3D-B	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	D	<6.0	0.079	0.19	30.1	<0.010	228	0.030	20,900	<1.0	3.18	<1.0	<30	<0.10	1.92	24,900	1,850	1.74	1.91	<0.40	339,000	0.0145	<0.40	0.0538	0.32	64.1
P5-3D-C	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	D	<6.0	0.074	0.21	28.8	<0.010	226	0.023	20,000	<1.0	2.92	<1.0	<30	<0.10	1.42	22,200	1,680	1.76	1.60	<0.40	335,000	0.0164	<0.40	0.0477	0.31	25.1
P5-3D-D	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	D	<6.0	0.090	0.18	29.1	<0.010	211	0.027	19,200	<1.0	2.88	<1.0	<30	<0.10	1.49	21,900	1,630	1.66	2.27	<0.40	299,000	0.0165	<0.40	0.0463	0.32	38.9
P5-3D-E	Porewater	P5-3	USAT	EB	1.3-1.5	1.3	1.5	Weathered Colluvium	---	13-Mar-12	D	<6.0	0.076	0.17	29.0	<0.010	218	0.023	18,900	<1.0	2.81	<1.0	<30	<0.10	1.28	20,800	1,630	1.54	1.82	<0.40	290,000	0.0167	<0.40	0.0391	0.26	34.0
P6-8S-A	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	D	2.4	0.137	0.84	115	<0.010	319	<0.040	142,000	<1.0	3.89	<0.40	1,280	<0.10	10.8	133,000	9,290	<0.20	1.03	<0.40	899,000	<0.0040	0.41	0.0593	0.26	2.4
P6-8S-A	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	T	185	0.225	0.99	119	<0.010	359	<0.060	156,000	<1.0	2.61	<1.0	1,600	0.31	13.2	144,000	9,060	0.36	1.52	<0.40	1,000,000	<0.0040	8.04	0.146	1.08	23.6
P6-8S-B	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	D	<2.0	0.130	0.74	121	<0.010	254	<0.050	128,000	<1.0	8.55	<0.40	2,050	<0.10	7.53	124,000	9,070	0.50	1.22	<0.40	828,000	<0.0040	<0.40	0.0651	0.23	3.4
P6-8S-B	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	T	476	0.216	1.64	133	0.012	289	0.106	131,000	<1.0	10.5	1.8	3,350	0.60	8.83	125,000	9,380	0.77	2.13	<0.40	848,000	0.0041	19.3	0.243	2.27	36.1
P6-8S-C	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	D	2.0	0.111	0.70	137	<0.010	249	<0.030	134,000	<1.0	11.1	<0.40	2,610	<0.10	6.75	127,000	10,200	0.30	0.49	0.50	825,000	<0.0040	<0.40	0.0880	0.38	<2.0
P6-8S-C	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	T	482	0.207	1.34	133	0.011	260	0.124	128,000	<1.0	10.1	1.9	3,610	0.68	7.94	122,000	9,160	0.65	2.17	0.41	796,000	0.0042	19.4	0.244	2.33	29.3
P6-8S-D	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	D	2.1	0.098	0.91	155	<0.010	235	<0.010	129,000	<1.0	15.3	0.45	3,070	<0.10	6.36	127,000	9,890	0.40	0.64	<0.40	803,000	<0.0040	<0.40	0.0839	0.22	<2.0
P6-8S-D	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	T	1,970	0.280	4.94	205	0.089	287	0.761	135,000	3.0	23.7	10.0	9,690	4.04	10.9	127,000	9,930	3.05	7.07	<0.40	802,000	0.0232	105	2.62	20.3	95.3
P6-8S-E	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	D	19.0	0.124	0.77	161	<0.010	217	<0.030	129,000	<1.0	17.2	<0.40	3,090	<0.10	5.41	126,000	9,950	0.44	0.80	<0.40	793,000	<0.0040	0.64	0.102	0.28	2.3
P6-8S-E	Porewater EAZ	P6-8	DS	EB	0.8-1.0	0.8	1.0	Weathered Colluvium	---	24-Jun-13	T	230	<0.18	1.02	172	<0.010	231	<0.050	130,000	<1.0	19.2	<1.0	3,760	0.43	5.83	127,000	10,100	0.56	0.98	0.53	803,000	<0.0040	11.5	0.190	1.33	9.8
P6-8D-A	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	1.4	0.034	0.558	31.8	0.0116	99.9	0.0709	57,200	<0.50	0.313	0.52	<30	<0.050	2.22	33,100	297	0.535	0.73	<0.20	97,300	<0.0020	<0.20	0.199	0.110	3.9
P6-8D-B	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	2.0	0.029	0.879	33.9	<0.0050	91.5	0.0638	57,600	<0.50	0.317	0.38	248	<0.050	1.66	31,300	324	0.477	0.63	<0.20	74,500	<0.0020	<0.20	0.189	0.092	5.6
P6-8D-C	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	1.4	0.026	0.833	34.1	<0.0050	86.9	<0.0050	58,000	<0.50	0.229	<0.20	280	<0.050	1.55	30,300	333	0.399	0.48	0.21	61,700	<0.0020	<0.20	0.187	0.068	<1.0 UJ
P6-8D-D	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	1.9	0.036	0.809	37.2	<0.0050	85.4	0.0610	61,300	<0.50	0.287	0.83	257	<0.050	1.37	30,200	342	0.395	0.74	<0.20	57,600	<0.0020	<0.20	0.188	0.078	7.6
P6-8D-E	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	1.8 J	0.031	0.771	37.5	<0.0050	73.9	<0.0050	62,300	<0.50	0.201 J	<0.20 UJ	289	<0.050	1.18	29,700	351	0.325	0.47	<0.20	46,100	<0.0020	<0.20	0.190	0.059	1.2 J
P7-3-A	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	D	18.7	0.51	3.7	295	<0.50	1,220	<0.050	510,000	<0.50	0.157	<0.50	240	<0.30	61	461,000	3,730	<2.0	2.81	<2.0	3,820,000	<0.050	<5.0	0.592	3.87	<3.0
P7-3-A	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	T	171	0.74	4.0	286	<0.50	1,190	<0.090	513,000	0.60	0.233	1.68	747	0.76	59	451,000	3,460	<2.0	3.58	<2.0	3,700,000	<0.050	8.4	0.566	4.28	13.9
P7-3-B	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	D	15.6	0.57	3.8	300	<0.50	1,290	<0.050	486,000	<0.50	0.145	<0.50	140	<0.30	60	461,000	3,490	<2.0	1.56	<2.0	3,840,000	<0.050	<5.0	0.602	3.55	<3.0
P7-3-B	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	T	2,800	0.87	5.8	289	<0.50	1,200	<0.25	515,000	2.79	1.63	9.75	6,540	4.21	58	458,000	3,140	<2.0	4.52	<2.0	3,840,000	<0.050	104	0.917	12.8	32.2
P7-3-C	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	D	13.8	0.56	3.1	283	<0.50	1,230	<0.050	471,000	<0.50	0.135	<0.50	130	<0.30	58	428,000	3,180	<2.0	2.74	<2.0	3,540,000	<0.050	<5.0	0.587	3.24	<3.0
P7-3-C	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	T	208	0.81	4.4	300	<0.50	1,320	<0.060	499,000	0.67	0.250	1.49	621	0.60	63	434,000	3,170	<2.0	4.04	<2.0	3,640,000	<0.050	9.9	0.645	4.06	5.3
P7-3-D	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	D	14.9	<0.50	3.6	295	<0.50	1,260	<0.050	478,000	<0.50	0.129	<0.50	147	<0.30	62	423,000	3,120	<2.0	1.30	<2.0	3,560,000	<0.050	<5.0	0.637	3.02	<3.0
P7-3-D	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	T	147	<0.50	3.9	280	<0.50	1,180	<0.050	513,000	<0.50	0.198	1.24	553	0.46	59	438,000	2,700	<2.0	1.61	<2.0	3,720,000	<0.050	7.3	0.643	3.17	3.6
P7-3-E	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	D	12.5	<0.50	3.6	289	<0.50	1,080	<0.050	460,000	<0.50	0.165	<0.50	337	<0.30	52	400,000	3,460	<2.0	1.09	<2.0	3,330,000	<0.050	<5.0	0.655	3.31	<3.0
P7-3-E	Porewater EAZ	P7-3	OB	EB	0.2-0.8	0.2	0.8	Beach sand/OC	---	24-Jun-13	T	685	0.59	3.4	277	<0.50	1,060	<0.050	466,000	0.87	0.467	2.20	1,880	1.13	51	405,000	3,270	<2.0	1.66	<2.0	3,350,000	<0.050	27.7	0.714	5.31	8.7
Field Duplicate/Equipment Blank/Travel Blank																																				
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jun-12	D	1.8	0.017 J	0.515	79.0	<0.0050	81.4	<0.0050	138,000	<0.50	0.372	0.21 U	1,340	<0.050	1.92	42,900	1,340	1.66	0.83	<0.20	32,900	0.0023	<0.20	0.159	0.062	10.4
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jul-12	D	2.2 J	0.035 J	0.65 J	79.2	<0.0050	93.3	0.0107 J	133,000	<0.50	0.378	0.24 J	1,580	0.054 J	1.83 J	44,100	1,320	1.52 J	0.97	<0.20	36,400	<0.0020	<0.20	0.151	0.078 J	8.8
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Aug-12	D	1.9	0.011	0.702	92.3	<0.0050	92.4	<0.0050	140,000	<0.50	0.386	<0.20	1,960	<0.050	2.04	45,700	1,390	1.64	0.34	<0.20	32,800	<0.0020	<0.20	0.162	0.068	<1.0
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-12	D	<5.0	<0.50	<2.0	155	<0.50	2,800	0.050	329,000	<0.50	0.732	0.64 J	233	<0.30	103	731,000	1,290	8.4	1.25 J	<2.0	5,690,000	0.052	<5.0	1.87	0.79	5.2
DUP-1 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	11-Oct-12	D	<5.0	<0.50	<3.0	50.7	<0.50	1,200	<0.050	122,000	<0.50	0.147	<0.50	273	<0.30	36	218,000	739	<2.0	<0.50	<2.0	2,280,000	<0.050	<5.0	0.922	0.59	<3.0
DUP-1 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-Nov-12	D	4.2 J	0.030	1.34	12.6	<0.0050	202	<0.0050	17,500	<0.50	0.071	<0.20	294	<0.050	3.55	13,800	128	0.973	0.33	<0.20	208,000	<0.0020	<0.20	0.216	0.268	1.2
DUP-1 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Dec-12	D	2.6	0.027	1.54	15.6	<0.0050	156	<0.0050	22,700	<0.50	0.142	<0.20	483	<0.050	2.14	14,400	177	0.709	0.37	<0.20	124,000	<0.0020	<0.20	0.175	0.121	1.9 J
DUP-1 (P14C-SW)	Surface Run-off	P14C	NA	CL	SW	SW	SW	---	---	18-Dec-12	D	10.5	0.324	0.407	30.2	0.0971	32.4	0.679	49,700	<0.50	20.1	12.0	<30	<0.050	1.64	8,590	1,060	0.392	17.0	<0.20	32,800	0.0376	<0.20	0.0105	0.296	93.8 J
DUP-1 (P14C-SW)	Surface Run-off	P14C	NA	CL	SW	SW	SW	---	---	18-Dec-12	T	745	0.337	0.581	31.2	0.343	<35	0.665	49,000	<0.50	19.7	21.0	345	0.424	1.80	8,580	1,050	0.404	16.6	<0.20	33,100	0.0378	0.73	0.0236	0.837	88.0
DUP-1 (P6-8I)	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	7-Jan-13	D	<5.0	<0.50	<2.0	137	<0.50	1,320	1.88 J	204,000	<0.50	0.536	3.85 J	135	<0.30	42	372,000	325	2.7	2.68 J	<2.0	3,000,000	<0.050	<5.0	1.01	<0.50	11.9 J
DUP-1 (P3-3-O)	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	11-Mar-13	D	10.5	<0.50	<2.0	7.8	<0.50	3,450	<0.050	252,000	<0.50	<0.050	0.65 J	<10	<0.30	125	757,000	3.98	7.8	<0.50	<2.0	6,800,000	<0.050	<5.0	2.01	1.12	<3.0
DUP-1 (P3-3-O)	Surface Water	P3-3	NA	WB	SW	SW	SW	---	---	11-Mar-13	T	23.6	<0.50	<2.0	8.1	<0.50	3,450	<0.050	252,000	<0.50	<0.050	0.53	21	<0.30	127	765,000	4.41	7.9	<0.50	<2.0	6,830,000	<0.050	<5.0	2.00	1.18	<3.0
DUP-1 (P18-4.5D)	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-13	D	3.7 J	0.037	0.231	58.6	<0.0050	38.9	0.149	101,000	<0.50	3.54	0.63 J	<30	<0.050	0.85	22,100	3,760	0.350	2.36	<0.20	21,400	0.0160	<0.20	1.19	0.474	8.7
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Jun-13	D	1.3 J	0.023	1.05 J	85.6	<0.0050	98.9	0.0084	171,000	<0.50	0.594	0.23	1,470	<0.050	2.18	52,600	1,500	0.834	0.94 J	<0.20	38,400	<0.0020	<0.20	0.124	0.100	4.6 J
DUP-1 (P6-8D-C)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	1.6	0.027	0.804	33.9	<0.0050	86.3	<0.0050	59,400	<0.50	0.236	<0.20	301	<0.050	1.49	30,300	337	0.392	0.49	<0.20	62,000	<0.0020	<0.20	0.195	0.074	1.7 J
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	16-Sep-13	D	1.5 J	0.038 J	1.56 J	135	<0.0050	254	0.0072 J	203,000	<0.50	0.711	0.30 J	1,850	<0.050	8.21 J	91,300	1,640	1.25 J	0.71	<0.20	326,000	<0.0020	<0.20	0.222	0.113 J	3.3
DUP-1 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Dec-13	D	2.3 J	0.05	0.309 J	113	<0.0050	109 J	0.0176 J	235,000	<0.50	0.487	0.55 J	97	<0.050	2.36	74,300	1,670	0.858	1.06	<0.20	56,500	0.003 J	<0.20	0.122	0.069	6.9 J
DUP-1 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Mar-14	D	<1.0	0.021	0.308	41.6	<0.0050	81.4	<0.0050 UJ	76,900	<0.50	0.204	<0.20	1,110	0.056	0.69	24,900	433	0.108	0.37	<0.20	27,500	<0.0020	<0.20	0.0323	<0.050	1.7 J
DUP-1 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jun-14	D	<1.0	0.013	2.79	180	<0.0050	45.1 J	<0.0050 UJ	220,000	<0.50	0.671	<0.20 UJ	3,550	<0.050	0.33 J	38,200	2,450	0.289	1.61 J	<0.20	26,100	0.004	<0.20	0.0164	<0.050	3.0 J
DUP-1 (P6-8I)	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Sep-14	D	<1.0	0.017	0.927	113	<0.0050	83.0	<0.0050	89,100	<0.50	0.663	<0.20 UJ	2,610	<0.050	1.23	35,200	703	0.284	0.98	<0.20	53,100	<0.0020	<0.20	0.156	0.057	<1.0 UJ
DUP-1 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	1-Dec-14	D	<1.0 UJ	0.011 J	0.372	45.5	<0.0050	128	<0.0050	82,700	<0.50	<0.050	<0.20 UJ	34	<0.050	1.18	25,700	517	0.155	<0.20 UJ	<0.20	109,000	<0.0020	<0.20	0.0115	<0.050	<1.0 UJ
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Jun-12	D	1.7 J	0.016 J	0.51	49.8	<0.0050	52.9	<0.0050 UJ	79,600	<0.50	0.249	<0.20	423	<0.050	0.69	25,300	566	0.568	0.38	<0.20	32,300	<0.0020	<0.20	0.163	0.078 J	1.3 J
DUP-2 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	5-Jul-12	D	3.6	0.041	1	28.4	<0.0050	112.0	0.0174	54,300	<0.50	0.057	<0.20 UJ	<30	<0.050	3.37	16,000	187	0.721	0.27	<0.20	84,000	0.0114	<0.20	0.117	0.451	<1.0 UJ
DUP-2 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	2-Aug-12	D	<1.0 UJ	0.03	0.349	98.7	<0.0050	169.0	0.0146 J	102,000	<0.50	0.244	0.29 J	1,280	<0.050	2.8	51,700	530	0.285	0.51	<0.20	231,000	0.0023	<0.20	0.108	<0.050	2.9 J
DUP-2 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Sep-12	D	<2.0	0.031	0.31	178	<0.010	349	0.011	117,000	<1.0	0.36	<0.40	1,260	<0.10	6.98	86,800	628	0.47	0.69	<0.40	713,000	0.0069	<0.40	0.235	<0.10	<2.0 UJ
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Oct-12	D	<2.0	0.039	0.82	174	<0.010	428	<0.010	234,000	<1.0	0.38	<0.40	941	<0.10	15.3	141,000	1,650	2.82	0.78	<0.40	762,000	<0.0040	<0.40	0.390	0.14	7.0
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	7-Nov-12	D	<1.0	0.076	0.401	138	<0.0050	223	0.0201 J	213,000	<0.50	0.440	0.41 J	87	<0.050	7.89	96,000	2,050	1.52	5.64	<0.20	360,000	<0.0020	<0.20	0.223	0.110	14.6
DUP-2 (P6-8I)	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	10-Dec-12	D	<1.0	0.028	1.140	50.6	<0.0050	171	<0.0050	69,500	<0.50	0.574	<0.20	546	<0.050	4.94	49,500	406	0.556	0.63	<0.20	199,000	<0.0020	<0.20	0.237	0.160	2.6
DUP-2 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	8-Jan-13	D	<1.0	0.038	1.02	82.5	<0.0050	172	<0.0050	157,000	<0.50	0.391	<0.20 UJ	643	<0.050	4.87	55,900	875	1.70	1.25	<0.20	107,000	<0.0020	<0.20	0.238	0.131	4.0 J
DUP-2 (PEC-5D)	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-13	D	<1.0	<0.010	2.23	176	0.0072	23.3 J	<0.0050	71,400	<0.50	1.28	<0.20	9,730	<0.050	1.39	22,300	720	0.142	0.80	<0.20	25,100	<0.0020	<0.20	0.0234	<0.050	2.9 J
DUP-2 (P3.8-3D)	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	D	2.0	0.309	0.56	270	<0.010	436	0.124	162,000	<1.0	2.71	<0.40	<60	<0.10	13.3	164,000	1,300	6.45	2.84	1.32	1,080,000	0.0383	<0.40	2.00	0.41	4.1
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Jun-13	D	2.1 J	0.040	0.980	30.8	<0.0050	102	0.0109 J	53,500	<0.50	0.279	0.28 J	300	<0.050	1.94	29,100	322	0.463	0.46	<0.20	76,200	<0.0020	<0.20	0.184	0.108 J	4.7 J
DUP-2 (P6-8D-E)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	24-Jun-13	D	2.5 J	0.027	0.723	38.3	<0.0050	75.5	<0.015	61,100	<0.50	0.256 J	0.46 J	308	<0.050	1.11	26,800	358	0.378	0.56	<0.20	44,500	<0.0020	<0.20	0.195	0.059	3.2 J
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	16-Sep-13	D	1.9	0.049 J	0.897	44.3	<0.0050	91.1	0.0051	59,800	<0.50	0.250	0.24	503	<0.050	1.43	28,300	354	0.443	0.44 J	<0.20	48,000	<0.0020	<0.20	0.180	0.111 J	2.5 J
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Dec-13	D	2.9 J	0.205	0.589	34.6	<0.0050	88.8	0.03	63,900	<0.50	0.189	0.42	97	<0.050	1.81	30,500	151	0.684	0.91	<0.20	54,500	<0.0020	<0.20	0.193	0.15	5.4
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	D	92.3	0.049	0.697	9.51	0.0207	167	<0.0050 UJ	22,300	0.64	<0.050 UJ	<0.20 UJ	795	<0.050	3.22	20,600	1,390	<0.050	<0.20 UJ	<0.20	217,000	<0.0020	3.98	0.0376	7.88	<1.0 UJ
DUP-2 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	10-Mar-14	T	103	0.073	0.749	7.24	0.0196	172	0.007	15,100	0.72	0.051	<0.50	657	0.17	3.21	13,900	997	0.096	<0.20	0.24	166,000	<0.0020	5.54	0.0457	8.02	<3.0
DUP-2 (PEC-5D)	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	D	<1.0 UJ	<0.010	2.20	183	0.0072 J	24.4	<0.0050	75,000	<0.50	1.08	<0.20 UJ	9,570	<0.050	1.17 J	24,100	820	0.092	0.72 J	<0.20	26,100	0.0027	<0.20	0.0107	<0.050	1.5 J
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	10-Sep-14	D	1.1	0.051	0.684	52.9	<0.0050	83.1	0.0121 J	76,500	<0.50	0.259	<0.20 UJ	383	<0.050	1.23	31,900	550	0.304	0.47 J	<0.20	47,900	<0.0020	<0.20	0.177	0.121	1.7 J
DUP-2 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	2-Dec-14	D	1.0 J	0.041	0.835	59.3	<0.0050	72.3	<0.0050 UJ	80,000	<0.50	0.199	<0.20 UJ	505	<0.050	0.71	29,600	528	0.344	0.55 J	<0.20	24,100	<0.0020	<0.20	0.195	0.256	<1.0 UJ
DUP-3 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Jun-12	D	<1.0 UJ	0.012 J	0.295	64.7	<0.0050	71.9	<0.0050 UJ	82,400	<0.50	0.231	<0.20	1,490	<0.050	1.22	22,700	472	0.151	0.32 J	<0.20	19,800	<0.0020	<0.20	0.0422	<0.050	<1.0 UJ
DUP-3 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	6-Jul-12	D	<1.0	<0.010	2.1	171	<0.0050	38.4	<0.0050	209,000	<0.50	0.726	<0.20 UJ	2,400	<0.050	0.72	39,900	2,420	0.444	0.33	<0.20	56,500	<0.0020	<0.20	0.0322	<0.050	1.4 J
DUP-3 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	3-Aug-12	D	3.5	0.055	0.854	27.8	<0.0050	127.0	0.0324	52,900	<0.50	<0.050	0.42 J	<30	0.059	3.61	15,400	88	0.604	0.26 J	<0.20	86,800	0.0049	<0.20	0.101	0.432	2.4 J
DUP-3 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Sep-12	D	17.8 J	0.072	1.27	34.1	<0.0050	118	<0.0050	50,000	<0.50	0.116 J	0.52 J	59 J	0.059	4.28	15,400	294	0.796	0.43 J	<0.20	87,900	<0.0020	0.80 J	0.148	0.434	1.8 J
DUP-3 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Oct-12	D	59.8 J	<0.50	<2.0	128	<0.50	710	<0.050	139,000	<0.50	0.343	<0.50	562 J	<0.30	<20	163,000	469	<2.0	0.87 J	<2.0	1,420,000	<0.050	<5.0	0.781	<0.50	<3.0
DUP-3 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Nov-12	D	3.3	0.059	1.11	29.0	<0.0050	117	0.0264	57,500	<0.50	<0.050	0.44 J	<30	<0.050	3.44	17,100	12.8	0.712	0.57	<0.20	90,000	0.0027	<0.20	0.125	0.369	6.7
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Dec-12	D	<1.0	0.107	0.670	95.4	<0.0050	186	0.0486	177,000	<0.50	0.274	0.27 J	187	<0.050	4.81	72,100	1,210	1.23	2.41	<0.20	164,000	<0.0020	<0.20	0.187	0.080	8.0
DUP-3 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	8-Jan-13	D	<1.0	0.033	0.314	36.0	<0.0050	116	0.0126	67,700	<0.50	0.204	<0.20	434	<0.050	1.13	25,100	313	0.203	0.41	<0.20	35,800	0.0020	<0.20	0.0927	0.055	<1.0 UJ
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	12-Mar-13	D	1.4	0.029	0.468	59.6	<0.0050	93.1	0.0850 J	150,000	<0.50	0.325	0.73 J	164	<0.050	3.22	45,200	767	1.90	1.76	<0.20	58,400	0.0035	<0.20	0.181	0.199	4.8 J
DUP-3 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	D	8.7	<0.50	<2.0	180	<0.50	250	<0.050	69,300	<0.50	0.336	<0.50	3,200	<0.30	<20	44,300	2,140	<2.0	<0.50	<2.0	448,000	<0.050	<5.0	0.236	1.76	<3.0
DUP-3 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	10-Jun-13	T	11.5	<0.50	<2.0	632	<0.50	500	<0.050	210,000	<0.50	0.697	<0.50	6,060	<0.30	24	162,000	4,850	<2.0	1.75	<2.0	1,190,000	<0.050	<5.0	0.956	1.36	5.0
DUP-3 (P4.2-3D)	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	16-Sep-13	D	2.8 J	0.039 J	0.373	92.8	<0.0050	94.2	0.112 J	144,000	<0.50	0.816	0.42 J	62	<0.050	1.20	41,400	2,910	0.372 J	0.90 J	<0.20	124,000	0.0036	<0.20	0.283	0.069	5.2 J
DUP-3 (PR2-3-NBO)	Surface water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	10.1	<0.50	3,560	<0.050	311,000	<0.50	<0.050	<0.50	<10	<0.30	137	959,000	3.43	12.2	<0.50	<2.0	8,580,000	<0.050	<5.0	2.65	1.33	<3.0
DUP-3 (PR2-3-NBO)	Surface water	PR2-3	NA	RL	NBO	NBO	NBO	---	---	10-Dec-13	T	15.7	<0.50	<2.0	10.1	<0.50	3,590	<0.050	315,000	<0.50	<0.050	<0.50	27	<0.30	138	950,000	3.78	12.4	<0.50	<2.0	8,670,000	<0.050	<5.0	2.65	1.5	<3.0
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	10-Mar-14	D	2.6 J	0.075	0.316	102	<0.0050	99.4	0.0157 J	226,000	<0.50	0.564	0.67 J	143	<0.050	2	70,300	1,590	0.917	0.97	<0.20	44,100	0.0033 J	<0.20	0.126	0.084 J	5.5 J
DUP-3 (P18.5-3D)	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	9-Jun-14	D	<1.0	<0.010	2.22	37.3	<0.0050	65.6	<0.0050	56,300	<0.50	0.462	0.39	2,460	<0.050	0.33 J	14,300	759	0.173	0.52	<0.20	19,800	0.0034 J	<0.20	0.0206	<0.050	2.8
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	11-Sep-14	D	<1.0 UJ	0.029	1.45	164	<0.0050	107	<0.0050	234,000	<0.50	0.842	<0.20	4,460	<0.050	1.92	73,200	2,240	0.504	0.67 J	<0.20	42,500	<0.0020	<0.20	0.105	0.085	<1.0 UJ
DUP-3 (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	2-Dec-14	D	<1.0	0.055	0.476	133	<0.0050	107	0.0091 J	217,000	<0.50	0.662	0.23 J	543	<0.050	1.62	69,500	2,090	0.511	1.38	<0.20	41,900	0.0025	<0.20	0.0869	0.091	4.4
DUP-4 (P3-7D)	Porewater	P3-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	6-Jun-12	D	<5.0	<0.50	<2.0	101	<0.50	990.0	0.094 J	157,000	<0.50	8.91 J	<0.50	2,390 J	<0.30	28	312,000	5,680	<2.0	5.28 J	<2.0	2,290,000	<0.050	<5.0	1.95 J	<0.50	86.3 J
DUP-4 (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Sep-12	D	<5.0	<0.50	<2.0	194	<0.50	610	<0.050	193,000	<0.50	0.238	<0.50	<10	<0.30	<20	271,000	421	2.1	0.94 J	<2.0	1,380,000	<0.050	<5.0	2.19	<0.50	25.7
DUP-4 (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	12-Oct-12	D	<5.0	<0.50	<2.0	111	<0.50	2,820	0.266	312,000	<0.50	<0.050	0.64 J	11 J	<0.30	77	814,000	29	4.2	0.81 J	<2.0	6,510,000	<0.050	<5.0	0.967	1.01	4.9
DUP-4 (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	8-Nov-12	D	<5.0	<0.50	<2.0	79.2	<0.50	1,480	0.063	183,000	<0.50	<0.050	0.55 J	17 J	<0.30	49	450,000	46.0	3.3	<0.50	<2.0	3,890,000	<0.050	<5.0	0.673	<0.50	<3.0 UJ
DUP-4 (P9-7I)	Porewater	P9-7	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	11-Dec-12	D	<1.0	0.025	0.320	76.6	<0.0050	98.4	0.0184	128,000	<0.50	0.484	0.60 J	2,990	<0.050	4.48	49,700	1,080	0.506	0.84	<0.20	114,000	0.0025	<0.20	0.139	<0.050	1.3 J
DUP-4 (P3-12-NBO)	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	D	<5.0	<0.50	<2.0	8.0	<0.50	3,110	<0.050	296,000	<0.50	<0.050 UJ	<0.50	<10	<0.30	113	891,000	3.03 J	7.2	<0.50	<2.0	7,810,000	<0.050	<5.0	1.88	0.93	<3.0
DUP-4 (P3-12-NBO)	Surface Water	P3-12	NA	WB	NBO	NBO	NBO	---	---	9-Jan-13	T	1,230	<0.50	<3.0	13.2	<0.50	3,260	<0.050	297,000	1.99	0.571	4.53	1,540	1.87 J	123	883,000	31.0	7.6	1.68	<2.0	7,780,000	<0.050	63.4	2.08	4.50	13.1 J
DUP-4 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Mar-13	D	2.2 J	0.038	0.678	25.5	<0.0050	163	0.0885 J	44,300	<0.50	0.313 J	0.57 J	167	<0.050	5.70	40,600	363	0.735	0.66 J	<0.20	272,000	<0.0020	<0.20	0.237	0.098	3.5 J
DUP-4 (P18-4.5S)	Porewater EAZ	P18-4.5	NA	FS	0.6-1.0	0.6	1.0	Beach sand	---	27-Mar-13	D	2.6	0.266 J	5.28 J	14.8	0.0068	44.1 J	<0.0050	46,100	<0.50	1.71	<0.20	6,160	<0.050	2.92 J	19,000	1,190 J	7.44 J	2.91	<0.20	31,000 J	<0.0020	<0.20	0.629 J	0.307	4.3 J
DUP-4 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Jun-13	D	<1.0	0.014 J	0.255	58.7	<0.0050	126	0.0236	83,600	<0.50	0.229	<0.20 UJ	798	<0.050	1.67	33,800	429	0.129	0.42	<0.20	108,000	0.0030	<0.20	0.0411	<0.050	1.5 J
DUP-4 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	17-Sep-13	D	<2.0	0.046	0.24	64.8	<0.010	379	0.017 J	62,900	<1.0	0.17 J	<0.40	421	<0.10	8.15	74,400	263	0.42	0.67 J	<0.40	679,000	0.0059	<0.40	0.0991	<0.10	<2.0 UJ
DUP-4 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Dec-13	D	<1.0	0.03 J	0.17 J	29.1	<0.0050	109	<0.0050	69,100	<0.50	0.125 J	<0.20	---	<0.050	1.67	34,400	254 J	0.190 J	0.37 J	<0.20	106,000	0.0021	<0.20	0.0454	<0.050	1.2 J

TABLE A-3
CONCENTRATIONS OF DISSOLVED AND TOTAL METALS IN WATER SAMPLES (µg/L [ppb])
FORESHORE
PARKLAND BURNABY REFINERY
2019 ANNUAL MONITORING PROGRAM

Sample ID[3]	Matrix	Sample Location	Well Location	Location Area	Screened Interval (m)	Top Screen (m)	Bottom Screen (m)	Lithology of Screen Interval (Primary)	Lithology of Screen Interval (Secondary)	Sample Date	Total/ Dissolved	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Selenium	Sodium	Thallium	Titanium	Uranium	Vanadium	Zinc
Updated Screening Level (D)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	300	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												CCME (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
Updated Screening Level (T)[1]												100	20	10	500	100	5,000	9	NS[2]	50	110	3	1,000	140	NS[2]	NS[2]	100	1,000	75	2	NS[2]	0.3	100	100	50	95
Source												BC AWQG (FW)	CSR/10	BIWQO	BC WWQG	BC WWQG	CSR/10	BIWQO	---	BIWQO	BC AWQC (FW)	BIWQO	BC AWQG (FW)	BIWQO	---	---	BC WWQG	CSR/10	BIWQO	BC AWQG	---	BC WWQC	CSR/10	BC WWQG	BC WWQG	BIWQO
RBMT[4]												---	---	---	---	---	---	---	---	---	---	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	90
DUP-4 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4	4.4	Colluvium	---	10-Mar-14	D	<1.0	0.144	0.51	39.3	<0.0050	84.1	0.0236	67,400	<0.50	0.349	0.38	134	<0.050	1.38	30,900	487	0.508	0.73	<0.20	40,200	<0.0020	<0.20	0.176	0.07	6.1
DUP-4 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	D	<5.0 UJ	<0.50	<2.0	9.3	<0.50	3,340	<0.050	235,000	<0.50	<0.050 UJ	0.93	<10	<0.30	132	749,000	2.49	7.5	<0.50 UJ	<2.0	6,310,000	<0.050	<5.0	2.00	1.18	<3.0
DUP-4 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	13-Jun-14	T	15.7 J	<0.50	<2.0	9.4	<0.50	3,370	<0.050	235,000	<0.50	<0.050	0.63 J	14 J	<0.30	131	749,000	3.99	7.6	<0.50 UJ	<2.0	6,290,000	<0.050	<5.0	1.87	1.24	<3.0
DUP-4 (P8-7.5I)	Porewater	P8-7.5	DS	EB	2.0-2.4	2	2.4	Colluvium	---	11-Sep-14	D	<2.0	0.047	1.15	686	<0.010	110	0.016 J	560,000	<1.0	0.72	<0.40	3,140	<0.10	15.2	174,000	3,550	0.50	1.68	<0.40	277,000	<0.0040	<0.40	1.22	<0.10	<2.0
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	D	11.2	<0.50	3.1	132	<0.50	800	<0.050	71,400	<0.50	0.123 J	<0.50	55	<0.30	<20	109,000	1,260	<2.0	<0.50	<2.0	1,190,000	<0.050	<5.0	0.14	2.91	<3.0
DUP-4 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	3-Dec-14	T	18.1	<0.50	3.6	129	<0.50	790	0.065	69,100	<0.50	0.098	<0.50	131	<0.30	<20	105,000	1,220	<2.0	<0.50	<2.0	1,160,000	<0.050	<5.0	0.131	2.98	4.7
DUP-5 (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	13-Sep-12	D	<5.0 UJ	<0.50	<2.0	108	<0.50	2,330	0.262	276,000	<0.50	<0.050	1.26 J	<10 UJ	<0.30	74	740,000	25.5	3.9	0.95	<2.0	5,680,000	0.054	<5.0	0.828	1.03	6.7 J
DUP-5 (PR2-12-NBO)	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	D	23.1	<0.50	<2.0	8.6	<0.50	2,900	0.087 J	224,000	<0.50	<0.050	0.87	<10	<0.30	119	740,000	4.34	7.0	<0.50	<2.0	5,680,000	<0.050	<5.0	1.84	1.06	<3.0
DUP-5 (PR2-12-NBO)	Surface Water	PR2-12	NA	RL	NBO	NBO	NBO	---	---	13-Nov-12	T	44.8	<0.50	<2.0	8.1	<0.50	2,870	0.078	224,000	<0.50	<0.050	0.89	33	<0.30	117	755,000	4.86	6.8	<0.50	<2.0	5,770,000	<0.050	<5.0	1.75	1.13	<3.0
DUP-5 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	11-Dec-12	D	<1.0	0.031	0.420	35.6	<0.0050	109	0.0271	56,900	<0.50	0.203	<0.20 UJ	450	<0.050	1.15	26,200	300	0.235	0.42	<0.20	62,600	0.0024	<0.20	0.112	0.057	1.3 J
DUP-5 (P14.5-12D)	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	9-Jan-13	D	<5.0	<0.50	<2.0	151 J	<0.50	2,150 J	<0.050	398,000	<0.50	1.12	<0.50	401 J	<0.30	134 J	550,000	2,560 J	2.2	0.91 J	<2.0	5,040,000	<0.050	<5.0	2.22 J	<0.50	5.2
DUP-5 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	13-Mar-13	D	<1.0	0.018 J	0.249	42.2	<0.0050	79.2	0.0316	75,400	<0.50	0.226	0.32	417	<0.050	0.93	24,300	456	0.166	0.44	<0.20	26,400	<0.0020	<0.20	0.0626	<0.050	1.6 J
DUP-5 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	D	24.8	0.101	1.43	9.67	0.015	240	<0.010	63,100	<1.0	<0.10 UJ	<0.40	2,450	<0.10	11.6	37,600	2,340	0.12	<0.40	<0.40	318,000	<0.0040	1.53	0.0213	4.74	16.8 J
DUP-5 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Jun-13	T	49.3	0.169 J	1.74	48.0 J	0.022	434 J	0.018 J	161,000 J	<1.0	0.10	<1.0	6,580 J	0.18	17.3	112,000 J	5,590 J	0.25	<0.40	<0.40 UJ	997,000 J	<0.0040	3.41	0.0355	5.65	<6.0 UJ
DUP-5 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5	Colluvium	Till	17-Sep-13	D	3.0 J	0.044 J	0.548	38.1	<0.0050	122	0.0121 J	57,900	<0.50	0.304 J	0.53 J	<30	<0.050	1.49	18,500	639	0.217	1.29 J	<0.20	96,500	<0.0020	<0.20	0.0298	0.100	6.0 J
DUP-5 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	D	<5.0	<0.50	<2.0	9.7	<0.50	3,480	<0.050	315,000	<0.50	<0.050	0.66	<10	<0.30	132	986,000	3.13	11.7	<0.50	<2.0	8,990,000	<0.050	<5.0	2.6	1.42	<3.0
DUP-5 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	10-Dec-13	T	55.8	<0.50	<2.0	9.9	<0.50	3,430	<0.050	305,000	<0.50	0.053	0.78	85	<0.30	130	955,000	4.69	11.2	<0.50	<2.0	8,700,000	<0.050	<5.0	2.55	1.44	<3.0
DUP-5 (PR2-3-O)	Surface water	PR2-3	NA	RL	SW	SW	SW	---	---	14-Mar-14	D	22.1	<0.50	<2.0	7.8	<0.50	2,630	<0.050	200,000	<0.50	<0.050 UJ	0.58	18 J	<0.30	99	633,000	5.58	6.3	0.5	<2.0	5,330,000	<0.050	<5.0	1.57	1.42 J	<3.0 UJ
DUP-5 (PR2-3-O)	Surface water	PR2-3	NA	RL	SW	SW	SW	---	---	14-Mar-14	T	40.6	<0.50	<2.0	7.7	<0.50	2,650	<0.050	194,000	<0.50	<0.050	0.57	26	<0.30	101	614,000	6.86	6.4	<0.50	<2.0	5,170,000	<0.050	<5.0	1.57	1.04	<3.0
DUP-5 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	13-Jun-14	D	<5.0	<0.50	<2.0	9.7	<0.50	3,470	<0.050	240,000	<0.50	0.105 J	0.78 J	<10	<0.30	133	759,000	3	7.7	<0.50	<2.0	6,460,000	<0.050	<5.0	1.99	1.19	<3.0
DUP-5 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	13-Jun-14	T	27.7	<0.50	<2.0	10	<0.50	3,450	<0.050	252,000	<0.50	<0.050	0.94	30 J	<0.30	135	773,000	5.32	7.8	<0.50 UJ	<2.0	6,980,000	<0.050	<5.0	2.01	1.26	<3.0
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	D	6.0	<0.50	3.3	577	<0.50	960	<0.050	275,000	<0.50	0.164 J	<0.50	310	<0.30	25	368,000	5,510	<2.0	<0.50	<2.0	2,920,000	<0.050	<5.0	0.511	2.41	<3.0
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	D	37.9	0.029	0.451	12.7	0.0143	163	0.0113 J	55,200	<0.50	<0.050	<0.20	1,160	<0.050	6.36	43,900	4,080	<0.050	0.7	0.49	290,000	<0.0020	1.73	0.0231	4.64	1.6 J
DUP-5 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	12-Sep-14	T	13.3	0.58	5.7	643	<0.50	1,330	<0.050	318,000	0.50	0.099	<0.50	285	<0.30	31	452,000	5,390	<2.0	<0.50	<2.0	3,710,000	<0.050	<5.0	0.540	2.64	3.1
DUP-5 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	T	49.5	0.069	0.434	13.3	0.0158	170	0.0062	53,700	<0.50	<0.050	<0.50	1,470	0.125	6.11	40,300	3,800	0.126 J	0.51	<0.20	278,000	<0.0020	2.63	0.0266	5.63	<3.0
DUP-6 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Jun-12	D	5.7	0.066	0.97	27	<0.0050	120	0.0243 J	54,100	<0.50	0.061	0.64 J	<30	0.073 J	4	14,400	101	0.953	0.45 J	<0.20	77,600	0.0056	<0.20	0.135	0.629	5.7 J
DUP-6 (P14.5-12D)	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Sep-12	D	<5.0 UJ	<0.50 UJ	<2.0 UJ	329	<0.50	1,140	<0.050 UJ	306,000	<0.50	<0.050	<0.50 UJ	<10	<0.30	37	303,000	6.61 J	3.5	0.51	<2.0	2,380,000	<0.050 UJ	<5.0 UJ	0.522	<0.50 UJ	<3.0
DUP-6 (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	252	<0.50	590	<0.050	198,000	<0.50	2.46	3.12	119	<0.30	<20	268,000	5,470	3.0	2.13	<2.0	1,330,000	<0.050	<5.0	1.66	0.53	29.9
DUP-6 (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	14-Mar-13	D	<5.0	<0.50	<2.0	176	<0.50	560	0.135 J	187,000	<0.50	1.04 J	0.56	76 J	<0.30	<20	278,000	1,700 J	<2.0	4.37 J	<2.0	1,420,000	<0.050	<5.0	1.50	<0.50	18.3
DUP-6 (P4.9-5)	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	D	<5.0	<0.50	2.5	194	<0.50	1,130	0.147 J	310,000	<0.50	9.00	0.57	2,250	<0.30	21	485,000	8,010	<2.0	14.2	<2.0	3,660,000	<0.050	<5.0	2.55	<0.50	4.8 J
DUP-6 (P4.9-5)	Porewater EAZ	P4.9-5	ATB	EB	0.4-0.8	0.4	0.8	Imported sand/OC	---	12-Jun-13	T	95.1	<0.50	2.4	207	<0.50	1,170	0.187 J	314,000	<0.50	8.57	0.76	2,240 J	<0.30	22	486,000	8,030	<2.0	14.1	<2.0	3,670,000	<0.050	<5.0	2.52	<0.50	6.6 J
DUP-6 (P14-17D)	Porewater	P14-17	NA	CL	4.6-5.0	4.6	5	Colluvium	---	17-Sep-13	D	8.6	0.013	1.20	4.39	<0.0050	279	0.0072 J	18,900	<0.50	<0.050 UJ	<0.20	<30	<0.050	4.71	34,200	104	1.27	<0.20 UJ	0.61	323,000	<0.0020	1.08	0.0694	0.282	<1.0 UJ
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	D	11.1	<0.50	<2.0	64.7	<0.50	630	<0.050	178,000	<0.50	0.05 J	<0.50	115	<0.30	21	170,000	2,320	<2.0	<0.50	<2.0	1,240,000	<0.050	<5.0	0.179	3.84	<3.0
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	11-Dec-13	T	41	<0.50	2.9	110	<0.50	870	<0.050	250,000	<0.50	0.106	<0.60 U	844	<0.30	27	245,000	3,540	2.6 J	0.71 J	<2.0	1,750,000	<0.050	<5.0	0.285	4.36	<3.0
DUP-6 (PR2-12-O)	Surface water	PR2-12	NA	RL	SW	SW	SW	---	---	14-Mar-14	D	21.1	<0.50	<2.0	8.1	<0.50	2,740	<0.050	198,000	<0.50	<0.050 UJ	0.6	<10	<0.30	99	620,000	5.32 J	6.5	<0.50	<2.0	5,160,000	<0.050	<5.0	1.61	0.88	<3.0 UJ
DUP-6 (PR2-12-O)	Surface water	PR2-12	NA	RL	SW	SW	SW	---	---	14-Mar-14	T	53.5	<0.50	<2.0	8.3	<0.50	2,790	<0.050	209,000	<0.50	<0.050	0.63	43	<0.30	101	662,000	7.02	6.4	<0.50	<2.0	5,480,000	<0.050	<5.0	1.6	1.01	<3.0
DUP-6 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5	Colluvium	Till	10-Jun-14	D	1.6	<0.010	0.449 J	38.7	<0.0050	132	<0.0050	66,500	<0.50	0.064	0.37 J	33	<0.050	1.54	20,500	512	0.185	0.25	<0.20	88,100	<0.0020	<0.20	0.0186	<0.050	2.7 J
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	D	17.8	<0.50	<2.0	775	<0.50	1,850	<0.050	521,000	<0.50	<0.050 UJ	<0.50	5,650	<0.30	26	666,000	23,600	<2.0	<0.50	<2.0	5,260,000	<0.050	<5.0	<0.050	3.70	<3.0
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	15.9	<0.50	<2.0	20.9	<0.50	1,010	0.053	124,000	<0.50	<0.050	<0.50	141	<0.30	34	251,000	1,580 J	<2.0	1.1 J	<2.0	2,120,000	<0.050	<5.0	0.367	2.2	<3.0
DUP-6 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	85.6	<0.50	<2.0	20.4	<0.50	1,010	0.066 J	123,000	<0.50	0.053	0.65	313	0.38 J	34	238,000	1,550 J	<2.0	1.79 J	<2.0	2,080,000	<0.050	<5.0	0.379	2.76	9.5 J
DUP-6 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	3-Dec-14	T	28.0	<0.50	<2.0	806	<0.50	1,960	<0.050	549,000	<0.50	0.111 J	1.07	5,990	0.34	34	697,000	21,600	<2.0	<0.50	<2.0	5,530,000	<0.050	<5.0	<0.050	3.51	3.2
DUP-7 (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	7-Jun-12	D	<5.0	<0.50	<2.0	100	<0.50	1,590	0.131 J	213,000	<0.50	<0.050	0.77	10	<0.30	71	476,000	62	4.1	0.59	<2.0	3,720,000	<0.050	<5.0	1.49	0.63	4.1 J
DUP-7 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	14-Sep-12	D	<1.0	<0.010	3.18	172	<0.0050	36.4	<0.0050	214,000	<0.50	0.786	0.30 J	3,750	<0.050	0.38	38,100	2,460	0.479	0.42	<0.20	26,400	<0.0020	<0.20	0.0200	<0.050	4.0 J
DUP-7 (P14.5-12D)	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-12	D	<5.0	<0.50	<2.0	143	<0.50	510	<0.050	157,000	<0.50	0.079	1.43	23	<0.30	<20	104,000	21.2	2.7	<0.50	<2.0	928,000	<0.050	<5.0	0.215	<0.50	3.5
DUP-7 (P14.5-12I)	Porewater	P14.5-12	NA	CL	3.0-3.4	3.0	3.4	Weathered Colluvium	---	15-Mar-13	D	1.9 J	0.068	0.720	46.2	<0.0050	244	<0.0050 UJ	69,900	<0.50	<0.050 UJ	<0.20 UJ	<30	<0.050	5.53	32,400	8.00	3.14	0.21 J	<0.20	311,000	<0.0020	<0.20	0.149	0.447	<1.0 UJ
DUP-7 (P15-12I)	Porewater	P15-12	NA	CL	2.6-3.0	2.6	3.0	Weathered Colluvium	---	13-Jun-13	D	2.5 J	0.016	0.872	20.1	<0.0050	191	<0.0050	10,100	<0.50	0.138 J	<0.20	69	<0.050	1.38	14,700	110	0.426	0.29 J	<0.20	177,000	<0.0020	<0.20	0.0676	0.140	2.0 J
DUP-7 (P18-4.5D)	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Sep-13	D	<1.0	0.026	0.195	43.5	<0.0050	43.2	0.0942	76,000	<0.50	2.60	0.80 J	<30	<0.050	0.74	16,900	3,650	0.211	1.62 J	<0.20	22,200	0.0031	<0.20	0.560	0.625	4.9 J
DUP-7 (P3.8-3D)	Porewater	P3.8-3	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	12-Dec-13	D	<5.0	<0.50	<2.0	96	<0.50	1,080	0.246	251,000	<0.50	2.19 J	0.66	26 J	<0.30	<20	472,000	948	2.5	1.65	<2.0	3,000,000	<0.050	<5.0	0.544	<0.50	4.1 J
DUP-7 (P4.2-3D)	Porewater	P4.2-3	CS	EB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	D	1.7	0.015	0.339	42.5	<0.0050	85.4	<0.0050 UJ	74,800	<0.50	0.257	<0.20 UJ	<30	<0.050	0.86	19,500	1,460	0.223	0.27 J	<0.20	58,800	0.0021	<0.20	0.0872	0.083	<1.0 UJ
DUP-7 (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	12-Jun-14	D	2.0 J	0.057	2.02	51.2	<0.0050	82.5	<0.0050	74,200	<0.50	0.398	<0.20 UJ	1,880	<0.050	1.27	29,600	699	0.371	0.49 J	<0.20	29,300	<0.0020	<0.20	0.179	0.192	<1.0 UJ
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	15.6	<0.50	6.7	672	<0.50	2,190	<0.050	610,000	<0.50	0.119 J	<0.50	81	<0.30	56	769,000	8,290	<2.0	<0.50	<2.0	5,970,000	<0.050	<5.0	0.486	4.21	<3.0
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	12-Sep-14	T	21.3	<0.50	6.9	689	<0.50	2,240	0.065 J	599,000	<0.50	0.124	0.66 J	277	0.43 J	55	761,000	8,780	<2.0	<0.50	<2.0	5,910,000	<0.050	<5.0	0.487	4.53	<3.0
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	D	19.6	0.048	0.771	37.4	0.0159	322	<0.0050	83,800	<0.50	<0.050	<0.20	1,210	<0.050	14.5	73,200	2,210	<0.050	0.26 J	0.51	542,000	<0.0020	0.97	0.0368	3.94	<1.0
DUP-7 (P6.25-3)	Porewater EAZ	P6.25-3	OB	EB	0.5-0.9	0.5	0.9	Beach sand/OC	Weathered Colluvium	4-Dec-14	T	30.2	0.091 J+	0.822	37.4	0.0148	332	0.148	75,700	<0.50	<0.050	<0.50	1,040	0.161	14.4	63,100	1,900	0.124	0.41	0.34	491,000	<0.0020	1.55	0.0384	3.7	<3.0
DUP-8 (P14-17I)	Porewater	P14-17	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Jun-12	D	7.2 J	<0.50	<12	56.8	<0.50	2,170	0.071 J	253,000	2.4 J	0.321	<0.50	24 J	<0.30	107	645,000	705	<2.0	2.15	<7.0	4,930,000	<0.050	<5.0	0.352	1.21	3.4
DUP-8 (PEC-5I)	Porewater	PEC-5	NA	RL	2.1-2.5	2.1	2.5	Weathered Colluvium	Colluvium	13-Dec-12	D	1.4 J	0.094	1.04	56.2	<0.0050	381	0.0305 J	31,100	<0.50	1.85	0.32 J	556	<0.050	11.4	27,500	1,210	2.90	4.64	<0.20	406,000	0.0050	<0.20	0.388	0.185	5.7
DUP-8 (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	15-Mar-13	D	<5.0	<0.50	<2.0	32.6	<0.50	1,030	<0.050	94,700	<2.5	<0.25	<1.0	<50	<0.30	34	234,000	4.3	4.1	<1.0	<2.0	2,000,000	<0.050	<5.0	0.680	0.88	<5.0
DUP-8 (P15-12D)	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Jun-13	D	3.2 J	0.112	4.45	9.39	<0.0050	519	<0.0050	6,090	<0.50	<0.050 UJ	<0.20 UJ	<30	<0.050	13.6	8,950	24.1	2.70	0.25 J	<0.20	443,000	<0.0020	<0.20	0.478	1.30	<1.0 UJ
DUP-8 (P18.5-3D)	Porewater	P18.5-3	NA	FS	2.6-3.0	2.6	3.0	Colluvium	--	19-Sep-13	D	1.5 J	0.015	2.41	43.6	<0.0050	57.0	<0.0050 UJ	50,600	<0.50	0.928	<0.20 UJ	2,210	<0.050	0.44	13,200	792	0.187	1.02	<0.20	18,200	0.0085	<0.20	0.0446	<0.050	1.1 J
DUP-8 (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	12-Dec-13	D	4.6 J	0.117	0.51	36.2	<0.0050	131	0.246 J	67,200	<0.50	0.148 J	0.75 J	<30	0.059	1.44	20,300	231	0.232	0.98	<0.20	92,800	<0.0020	<0.20	0.0245	0.085	7.9 J
DUP-8 (P3R-7D)	Porewater	P3R-7	DS	WB	1.5-1.7	1.5	1.7	Weathered Colluvium	---	11-Mar-14	D	2	0.026	0.364	40.6	<0.0050	135	<0.0050	73,600	<0.50	0.110 J	0.44 J	<30	<0.050	1.29	21,400	465	0.191	0.29 J	<0.20	95,600	<0.0020	<0.20	0.0206	<0.050	2.7 J
DUP-8 (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	12-Jun-14	D	<1.0	0.011	0.451	63.3	<0.0050	98.9	<0.0050	87,600	<0.50	0.130	0.35 J	2,390	<0.050	0.78	25,300	446	0.11	0.34	<0.20	22,500	<0.0020	<0.20	0.0271	<0.050	1.6
DUP-8 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	D	13.4	<0.50	4.0	486	<0.50	2,270	<0.050	562,000	<0.50	0.095 J	<0.50	39	<0.30	58	830,000	7,210	<2.0	<0.50	<2.0	6,140,000	<0.050	<5.0	0.441	4.26	<3.0
DUP-8 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	12-Sep-14	T	17.3	<0.50	4.2	470	<0.50	2,170	<0.050	566,000	<0.50	0.097 J	<0.50	272	<0.30	53	800,000	7,660	<2.0	<0.50	<2.0	6,050,000	<0.050	<5.0	0.479	4.51	<3.0 UJ
DUP-9 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	8-Jun-12	D	<1.0	<0.010	2.87	160	<0.0050	29.0	0.0068 J	226,000	<0.50	0.819	<0.20 UJ	3,760	<0.050	0.43	37,100	2,330	0.519	0.37	<0.20	25,000	<0.0020	<0.20	0.0196	<0.050	1.5 J
DUP-9 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	13-Dec-12	D	<1.0	<0.010	0.710	191	<0.0050	54.5	<0.0050	217,000	<0.50	0.619	0.26	245	<0.050	0.55	36,700	1,940	0.396	0.40	<0.20	25,000	<0.0020	<0.20	0.0166	<0.050	5.4 J
DUP-9 (P14R-12I)	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	15-Mar-13	D	1.9	0.027	0.865	11.7	<0.0050	118	<0.0050	20,300	<0.50	<0.050	0.37 J	<30	<0.050	3.25	14,800	14.1	0.586	0.28	<0.20	76,900	<0.0020	<0.20	0.150	0.348	2.8 J
DUP-9 (P3.8-3S)	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13	D	<5.0	<0.50	2.2	29.0	<0.50	1,960	<0.050	118,000	<0.50	1.24	<0.50	326	<0.30	52	307,000	364	6.1	2.77	<2.0	3,040,000	<0.050	<5.0	3.16	1.65	3.4 J
DUP-9 (P3.8-3S)	Porewater EAZ	P3.8-3	CS	WB	0.6-1.0	0.6	1.0	Weathered Colluvium	Beach Sand	14-Jun-13	T	3,090	<0.50	2.9	37.4	<0.50	2,010	0.088	116,000	2.14	2.39	6.33	3,330	0.92	61	306,000	411	6.2	3.42	<2.0	3,030,000	<0.050	124	3.79	10.6	8.9
DUP-9 (PEC-5D)	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5.0	Colluvium	---	19-Sep-13	D	<1.0	<0.010 UJ	2.35	180	0.0058	21.0	0.0077 J	69,900	<0.50	1.09	<0.20	9,530	<0.050	1.05	22,300	725	0.110 J	0.77 J	<0.20	25,500	<0.0020	<0.20	0.0116	<0.050	1.7 J
DUP-9 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	12-Dec-13	D	1.3 J	0.022	0.654	168	<0.0050	43.3	0.0103 J	220,000	<0.50	0.709	<0.20	245	0.056	0.38	38,800	2,370	0.243	0.51	<0.20	27,900	0.0046	<0.20	0.0134	<0.050	1.9 J
DUP-9 (P3.5-12D)	Porewater	P3.5-12	CS	WB	4.6-5.0	4.6	5.0	Colluvium	---	11-Mar-14	D	<5.0	<0.50	<2.0	129	<0.50	1,400	<0.050	225,000	2.97 J	1.87	0.81 J	1,490	<0.30	43	498,000	685	4	1.62 J	<2.0	3,060,000	<0.050	<5.0	0.158	<0.50	3.1
DUP-9 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	D	9.9	0.050 J	1.00	138	<0.010	333	<0.010 UJ	108,000	<1.0	<0.10	<0.40	311	<0.10	17.1	85,400	2,710	<0.10	2.47	<0.40	678,000	<0.0040	0.96	0.322	2.40	<2.0
DUP-9 (P8-3)	Porewater EAZ	P8-3	OB	EB	0.3-0.7	0.3	0.7	Beach sand/OC	---	13-Jun-14	T	13.1	0.100	0.95	109	<0.010	337	0.027 J	88,600	<1.0 UJ	0.110	<1.0	369	<0.10	15.0	67,900	2,130	<0.10 UJ	1.53	<0.40	533,000	<0.0040	1.09	0.263	2.43	6.2
DUP-9 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	D	9.3 J	<0.50	<2.0	728	<0.50	2,090	<0.050	564,000	<0.50	0.101	<0.50	665	<0.30	40	904,000	4,530	<2.0	<0.50	<2.0	7,300,000	<0.050	<5.0	0.154	4.12	<3.0
DUP-9 (P5.25-3)	Porewater EAZ	P5.25-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	18-Sep-14	T	764 J	0.89 J	5.0 J	720	<0.50	1,970	1.70 J	524,000	2.12 J	1.82 J	17.7 J	15,700 J	2.33 J	40	841,000	4,750	2.8 J	4.80 J	<2.0	6,490,000	<0.050	44.3 J	0.498 J	10.6 J	41.9 J
DUP-10 (P18-4.5D)	Porewater	P18-4.5	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	18-Jun-13	D	<1.0	0.026	0.215	42.3	<0.0050	36.9	0.107	85,600	<0.50	2.62	0.27 J	<30	<0.050	0.54	18,300	3,400	0.301	1.65	<0.20	21,000	0.0025	<0.20	0.813	0.717	1.8
DUP-10 (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	19-Sep-13	D	<1.0	0.032	3.49	174	<0.0050	35.9	0.0188	205,000	<0.50	0.718	<0.20	3,430	<0.050	0.33	35,000	2,300	0.332	0.43	<0.20	23,700	0.0041	<0.20	0.0158	<0.050	1.9
DUP-10 (P18.5-3D)	Porewater	P18.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	13-Dec-13	D	5.2 J	0.077	2.49	38.2	<0.0050	64.2	0.0198 J	56,600	<0.50	0.489	0.25 J	2,420	<0.050	0.43	13,400	752	0.15	0.67 J	<0.20	19,400	0.0046	<0.20	0.0227	<0.050	3.2 J
DUP-10 (P17.5-3D)	Porewater	P17.5-3	NA	FS	4.6-5.0	4.6	5.0	Colluvium	---	12-Mar-14	D	2.2	0.068	2.58	55.9	<0.0050	53.8	<0.0050	187,000	<0.50	0.348	0.24	108	<0.050	1.43	39,300	446	0.311	0.55 J	<0.20	37,000	<0.0020 UJ	<0.20	0.781	0.065	14.7 J
DUP-10 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	D	36.3	0.126	5.60	8.40	0.0171	172	0.0055	52,700	<0.50	<0.050	<0.20	4,530	<0.050	12.2	66,300	2,450	0.273	0.35	<0.20	334,000	<0.0020	1.75	0.177	5.36	<1.0 UJ
DUP-10 (P7.5-3)	Porewater EAZ	P7.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	---	13-Jun-14	T	45.0	0.243	5.27	11.7	0.0179	201	0.0127 J	54,900	0.74	0.050	<0.50	4,440	0.178	12.8	65,500	2,360	0.530	0.31	<0.20	314,000	<0.0020	2.53	0.200	5.10	<3.0
DUP-10 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	10.0	<0.50	3,850	<0.050	311,000	<0.50	0.069 J	1.11 J	<10	<0.30	153	925,000	3.40	8.2	0.53	<2.0	8,360,000	<0.050	<5.0	2.45	1.33	3.6
DUP-10 (P8-12-O)	Surface water	P8-12	NA	EB	SW	SW	SW	---	---	12-Sep-14	T	16.2	<0.50	<2.0	9.9	<0.50	3,960	<0.050	308,000	<0.50	<0.050	0.63 J	30	<0.30	155	935,000	4.15	8.2	<0.50	<2.0	8,390,000	<0.050	<5.0	2.51	1.35	<3.0
DUP-11 (P6-3-NBO)	Surface water	P6-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	D	7.5 J	<0.50	<2.0	10.4	<0.50	2,680	<0.050	217,000	<0.50	0.111 J	0.89 J	<10	<0.30	125	720,000	4.44	6.9	<0.50	<2.0	5,630,000	<0.050	<5.0	1.88	1.05	<3.0
DUP-11 (P6-3-NBO)	Surface water	P6-3	NA	EB	NBO	NBO	NBO	---	---	24-Jun-13	T	40.7	<0.50	<3.0	9.6	<0.50	2,780	<0.050	224,000	<0.50	<0.050	4.21 J	33	0.39 J	133	744,000	5.15	7.1	<0.50	<3.0	5,830,000	<0.050	<5.0	1.94	1.18	3.4
DUP-11 (P8-12-NBO)	Surface water	P8-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	D	<5.0	<0.50	<2.0	11.0	<0.50	3,260	<0.050	308,000	<0.50	0.125 J	1.03 J	<10	<0.30	118	946,000	2.77	8.0	0.78 J	<2.0	7,650,000	<0.050	<5.0	2.34	1.25	5.4 J
DUP-11 (P8-12-NBO)	Surface water	P8-12	NA	EB	NBO	NBO	NBO	---	---	20-Sep-13	T	19.5 J	<0.50	<2.0	10.6	<0.50	3,310	<0.050	303,000	<0.50	<0.050	<0.50	21 J	<0.30	124	935,000	3.66	7.9	<0.50	<2.0	7,400,000	<0.050	<5.0	2.28	1.28	<3.0
DUP-11 (P14.5-12D)	Porewater	P14.5-12	NA	CL	4.6-5.0	4.6	5	Weathered Colluvium	---	16-Dec-13	D	6.4	0.096	1.69	7.39	<0.0050	218	<0.0050	9,690	<0.50	<0.050	<0.20	<30	<0.050	2.03	9,120	9.66	1.45	<0.20	<0.20	128,000	<0.0020	<0.20	0.0457	0.638	<1.0 UJ
DUP-11 (P15-12D)	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5	Weathered Colluvium	---	12-Mar-14	D	<2.0 UJ	0.266 J	3.98	9.21	<0.010 UJ	574	<0.010 UJ	9,690	<1.0 UJ	<0.10	<0.40 UJ	<30 UJ	<0.10 UJ	18.7	17,600	3.23	2.67	<0.40 UJ	<0.40 UJ	580,000	0.0045 J	<0.40 UJ	0.697	2.06	<2.0 UJ
DUP-11 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	D	28.8	0.030	0.471	11.6	0.0159	237	<0.0050	40,800	<0.50	0.055	<0.20	300	<0.050	11.4	34,500	1,130	<0.050	<0.20 UJ	<0.20	316,000	<0.0020	1.78	0.0216	5.82	<1.0 UJ
DUP-11 (P6.5-3)	Porewater EAZ	P6.5-3	OB	EB	0.4-0.8	0.4	0.8	Beach sand/OC	Weathered Colluvium	13-Jun-14	T	45.1 J	0.071	0.486	11.7	0.0160	257	0.0066	38,900	<0.50	0.060	<0.50	416	0.132	12.4	31,800	1,030	0.081	0.25	<0.20	285,000	<0.0020	3.89 J	0.0237	5.77	<3.0
DUP-11 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	12-Sep-14	D	<5.0	<0.50	<2.0	9.4	<0.50	3,650	<0.050	323,000	<0.50	<0.050	<0.50 UJ	<10	<0.30	146	945,000	3.81	8.2	<0.50	<2.0	8,800,000	<0.050	<5.0	2.51	1.34	<3.0
DUP-11 (P3-12-O)	Surface water	P3-12	NA	WB	SW	SW	SW	---	---	12-Sep-14	T	15.4	<0.50	<2.0	10.1	<0.50	3,870	<0.050	308,000	<0.50	<0.050	<0.50	27	<0.30	151	933,000	3.97	8.2	<0.50	<2.0	8,190,000	<0.050	<5.0	2.50	1.42	<3.0
DUP-12 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	D	6.8 J	<0.50	<3.0	10.6	<0.50	2,810	<0.050	225,000	<0.50	0.137 J	1.33 J	<10	<0.30	143	741,000	9.43	7.2	0.57	<2.0	5,920,000	<0.050	<5.0	2.00	1.24	<3.0
DUP-12 (P3-12-NBO)	Surface water	P3-12	NA	WB	NBO	NBO	NBO	---	---	24-Jun-13	T	1,080	<0.50	<4.0	13.8	<0.50	2,830	0.082 J	232,000	1.96	0.609	4.59	1,440	1.62	144	768,000	32.4	7.1	2.14	<3.0	6,040,000	<0.050	48.4	2.04	4.20	10.2 J
DUP-12 (P15-12D)	Porewater	P15-12	NA	CL	4.6-5.0	4.6	5	Weathered Colluvium	---	16-Dec-13	D	<5.0	<0.50	2.4	30.1	<0.50	770	<0.050	27,500	<0.50	0.120 J	<0.50	<10	<0.30	32	53,400	21.2	4	<0.50	<2.0	1,120,000	<0.050	<5.0	0.983	2.04	3.1
DUP-12 (PEC-5D)	Porewater	PEC-5	NA	RL	4.6-5.0	4.6	5	Colluvium	---	14-Mar-14	D	<1.0	<0.010	2.47	182	0.0057	20.6	0.0090 J	77,300	<0.50	1.12	0.21	10,200	<0.050	1.18	23,300	786	0.108	0.91	<0.20	27,000	<0.0020	<0.20	0.0122	<0.050	4.1 J
DUP-A (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Sep-11	D	8.3	0.047	0.42	62.4	<0.0050	69	0.0376	70,300	<0.50	0.231	<0.50	<3.0	<0.050	1.68	22,700	521	2.24	0.66	<0.20	24,900	0.0078	0.39 J	0.212	0.628	<3.0
DUP-A (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	13-Mar-12	D	6.2	<0.50	<2.0	198	<0.50	650	<0.050	172,000	<0.50	0.681	<0.50	<10	<0.30	<20	262,000	1,470	2.9	0.85	<2.0	1,510,000	<0.050	<5.0	2.17	<0.50	39.8
DUP-B (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	28-Sep-11	D	<8.0	0.01	0.132	71.3	<0.0050	81.6	<0.0050	91,600	<0.50	0.12	<0.50	627	<0.050	1.85	24,900	490	0.183	0.25	<0.20	21,700	0.0048	0.2	0.0391	<0.050	<3.0
DUP-B (P14R-12I)	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	14-Mar-12	D	5.2	0.063	1.85	14.9	<0.0050	188	<0.0050	21,600	<0.50	0.325	<0.50	60	<0.050	9.12	22,200	366	0.727	0.24	<0.20	196,000	<0.0020	<0.20	0.200	0.659	<3.0
DUP-C (P3R-7I)	Porewater	P3R-7	DS	WB	3.0-3.4	3.0	3.4	Colluvium	---	5-Oct-11	D	<6.0	0.055	3.85	4.2	<0.010	382	<0.010	30,100	<1.0	0.47	<1.0	120	<0.10	11.9	54,200	409	2.72	0.96	0.44 J	502,000	<0.0040	<0.40	0.182	1.52	<6.0
DUP-C (P14R-12D)	Porewater	P14R-12	NA	CL	4.6-5.0	4.6	5.0	Colluvium	---	14-Mar-12	D	8.8	<0.50	<2.0	71.1	<0.50	1,490	<0.050	151,000	<0.50	0.055	0.67	<10	<0.30	65	332,000	414	3.5	0.55	<3.0	2,990,000	<0.050	<5.0	1.81	0.89	8.1
DUP-D (PR2-8D)	Porewater	PR2-8	NA	RL	4.6-5.0	4.6	5.0	Weathered Colluvium	---	7-Oct-11	D	<5.0	<0.50	<2.0	141	<0.50	<10	<0.050	195,000	<0.50	0.866	<0.50	<10	<0.30	<20	33,900	2,310	<2.0	1.08	<2.0	26,800	<0.050	<5.0	<0.050	<0.50	20.5
DUP-D (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	15-Mar-12	D	7.4	0.055	0.903	30.2	<0.0050	123	0.0197	56,400	<0.50	0.098	<0.50	<30	<0.050	2.83	16,100	55.0	1.64	0.38	<0.20	79,800	0.0207	<0.20	0.161	0.717	<3.0
DUP-E (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	3-Nov-11	D	<5.0	<0.50	<2.0	68.2	<0.50	<10	<0.050	92,400	<0.50	0.111	0.95 J	<10	<0.30	<20	24,500	516	<2.0	<0.50	<2.0	22,500	<0.050	<5.0	<0.050	<0.50	5.8
DUP-E (P6-8I)	Porewater	P6-8	DS	EB	2.0-2.4	2.0	2.4	Colluvium	---	26-Mar-12	D	<3.0	0.039	0.227	82.1	<0.0050	53.5	0.0145	76,200	<0.50	0.997	<0.50	<30	<0.050	1.41	28,400	646	0.347	1.08	<0.20	26,500	0.0161	<0.20	0.204	<0.050	13.8
DUP-F (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	4-Nov-11	D	5.0	<0.50	<2.0	57.7	<0.50	<10	0.107	75,100	<0.50	0.262	<0.50	<10	<0.30	<20	24,200	458	2.1	0.89	<2.0	24,000	<0.050	<5.0	0.192	0.57	18.0
DUP-F (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	26-Mar-12	D	4.6	0.037	0.365	56.7	<0.0050	62.7	0.0300	74,400	<0.50	0.344	<0.50	<30	<0.050	0.56	23,300	537	0.975	0.80	<0.20	18,800	0.0078	<0.20	0.160	0.421	9.7
DUP-G (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	5-Dec-11	D	<3.0	0.012	0.122	64.1	<0.0050	92	0.0541	90,500	<0.50	0.091	<0.50	765 J	0.159	1.46	25,300	514	0.133	0.72	<0.20	22,000	0.0034	<0.20	0.03	<0.050	11.9
DUP-G (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	26-Mar-12	D	3.0	0.024	0.263	75.9	<0.0050	95	<0.0050	121,000	<0.50	0.396	<0.50	<30	<0.050	2.66	38,200	1,340	1.89	0.50	<0.20	37,000	0.0053	<0.20	0.147	0.103	50.0
DUP-H (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	5-Dec-11	D	5.5 J	0.075 J	0.277 J	81	<0.0050	112	0.007 J	112,000	<0.50 UJ	0.579 J	<0.50 UJ	<30 UJ	<0.050	2.83 J	36,000	1,420	9.15	1.37	<0.20	36,900	0.0093 J	<0.20 UJ	0.261	0.321 J	9.8
DUP-H (P14R-12I)	Porewater	P14R-12	NA	CL	2.6-3.0	2.6	3.0	Colluvium	---	7-Dec-11	D	3.5	0.105	1.51	18.6	<0.0050	194	0.0074	28,600	<0.50	0.182	<0.90	<30	0.059	<20	28,600	73.1	1.52	0.63	<0.20	253,000	<0.0020	<0.20	0.33	0.46	19.6
DUP-H (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	27-Mar-12	D	<3.0	<0.010	0.116	65.5	<0.0050	83.9	<0.0050	90,400	<0.50	0.084	<0.50	<30	<0.050	1.24	24,000	512	0.086	0.26	<0.20	18,000	0.0022	<0.20	0.0313	<0.050	<3.0
DUP-I (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	7-Dec-11	D	10.5	0.172	0.535	25.5	<0.0050	116	0.0086	42,300	<0.50	0.052	<0.50	<30	<0.050	<20	12,200	13.4	4	0.33	<0.20	65,000	0.0056	<0.20	0.102	0.43	7.2
DUP-I (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	9-Apr-12	D	<3.0	0.012	0.438	56.7	<0.0050	84.2	0.0063	77,900	<0.50	0.359	0.52	346	0.069	1.56	29,600	544	0.447	0.88	<0.20	69,500	0.0036	<0.20	0.176	<0.050	11.0
DUP-J (P3.5-7D)	Porewater	P3.5-7	CS	WB	2.1-2.3	2.1	2.3	Weathered Colluvium	---	8-Dec-11	D	<5.0	<0.50	<2.0	219 J	<0.50	490	0.062	160,000	0.85 J	0.930 J	0.69 J	<10	<0.30	<20	222,000	1,870 J	3.6	1.24 J	<2.0	1,340,000	<0.050	<5.0	2.24	<0.50	40.8 J
DUP-J (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	9-Apr-12	D	<3.0	0.021	0.261	78.6	<0.0050	90.2	<0.0050	123,000	<0.50	0.393	<0.50	258	<0.050	2.21	39,400	1,350	1.77	0.53	<0.20	34,100	0.0028	1.22	0.156	0.092	24.7
DUP-K (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	4-Jan-12	D	<5.0	<0.50	<2.0	65.8	<0.50	110	<0.050	98,200	<0.50	0.244	<0.50	<10	<0.30	<20	37,900	607	<2.0	1	<2.0	110,000	<0.050	<5.0	0.071	<0.50	8.3
DUP-K (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	10-Apr-12	D	<3.0	0.022	0.148	64.9	<0.0050	86.1	<0.0050	91,200	<0.50	0.087	<0.50	1,210	<0.050	1.12	24,100	531	0.102	0.51	<0.20	23,200	<0.0020	<0.20	0.0293	<0.050	4.3
DUP-L (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	4-Jan-12	D	<5.0	<0.50	<2.0	70.5	<0.50	<100	<0.050	114,000	<0.50	0.542	0.51	<10	<0.30	<20	37,400	1,350	7.7	1.05	<2.0	33,400	<0.050	<5.0	0.25	<0.50	7.3
DUP-L (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	7-May-12	D	<3.0	0.012	0.610	53.1	<0.0050	58.8	0.0052	76,200	<0.50	0.337	<0.50	388	<0.050	0.90	24,700	528	0.448	0.32	<0.20	35,600	0.0033	<0.20	0.156	0.052	8.8
DUP-M (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	5-Jan-12	D	6.5	0.047	0.42	52.8	<0.0050	63.8	0.0528	75,600	<0.50	0.249	<0.50	<30	<0.050	<1.0	24,000	403	1.55	1.13	<0.20	20,200	0.0075	<0.20	0.192	0.6	6.2
DUP-M (P3R-7D)	Porewater	P3R-7	DS	WB	4.6-5.0	4.6	5.0	Colluvium	Till	8-May-12	D	4.6	0.056	1.11	27.9	<0.0050	111	<0.0050	55,000	<0.50	<0.050	<0.50	<30	<0.050	3.26	14,700	61.3	1.23	0.24	<0.20	78,600	0.0115	<0.20	0.160	0.665	<3.0
DUP-N (P8-7.5D)	Porewater	P8-7.5	DS	EB	3.6-4.0	3.6	4.0	Colluvium	Till	1-Feb-12	D	<6.0	0.068	0.38	78.9	<0.010	86	<0.010	117,000	<1.0	0.63	<1.0	<30	<0.10	1.96	36,500	1,340	9.50	1.50	<0.40	33,000	0.0140	<0.40	0.357	0.22	16.4
DUP-N (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	9-May-12	D	<3.0	<0.010	0.223	69.2	<0.0050	72.2	<0.0050	86,400	<0.50	0.164	<0.50	1,950	<0.050	1.52	23,600	545	0.096	0.29	<0.20	19,700	0.0021	<0.20	0.0379	<0.050	<3.0
DUP-O (P6-8D)	Porewater	P6-8	DS	EB	4.0-4.4	4.0	4.4	Colluvium	---	1-Feb-12	D	<3.0	0.023	0.511	51.7	<0.0050	61.3	0.0163	76,700	<0.50	0.552	<0.50	<30	0.098	0.53	25,000	673	0.890	0.58	<0.20	24,500	0.0041	<0.20	0.148	0.212	163
DUP-P (P9-7D)	Porewater	P9-7	DS	EB	4.4-4.8	4.4	4.8	Colluvium	---	1-Feb-12	D	<3.0	0.026	0.110	57.9	<0.0050	80.2	0.0055	88,300	<0.50	0.122	<0.50	<30	0.080	2.23	26,000	472	0.170	0.38	<0.20	35,700	<0.0020	<0.20	0.0446	<0.050	9.8
EQUIPMENT BLANK 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4-Jun-12	D	<1.0	0.011	<0.050	0.15	<0.0050	<5.0	<0.0050	64	<0.50	<0.050	0.27	<30	<0.050	<0.20	<100	<0.20	<0.050	<0.20	<0.20	<2,000	0.0060	<0.20	<0.0020	<0.050	1.4
EQUIPMENT BLANK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	5-Jun-12	D	<1.0	<0.010	<0.050	<0.10	<0.0050	<5.0	<0.0050	<50	<0.50	<0.050	<0.20	<30	<0.050	<0.20	<100	<0.20	<0.050	<0.20	<0.20	<2,000	<0.0020	<0.20	<0.0020	<0.050	<1.0
EQUIPMENT BLANK 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6-Jun-12	D	1.3	<0.010	<0.050	0.13	<0.0050	<5.0	<0.0050	73	<0.50	<0.050	0.34	<30	<0.050	<0.20	<100	<0.20	<0.050	<0.20	<0.20	<2,000	<0.0020	<0.20	<0.0020	<0.050	<1.0
EQUIPMENT BLANK 4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7-Jun-12	D	<1.0	<0.010	<0.050	0.10	<0.0050	<5.0	<0.0050	56	<0.50	<0.050	<0.20	<30	<0.050	<0.20	<100	<0.20	<0.050	<0.20	<0.20	<2,000	<0.0020	<0.20	<0.0020	<0.050	1.1
EQUIPMENT BLANKS	NA	NA	NA	NA	NA	NA	NA	NA	NA	8-Jun-12	D	<1.0	<0.010	<0.050	<0.10	<0.0050	<5.0	<0.0050	<50	<0.50	<0.050	0.20	<30	<0.050	<0.20	<100	<0.20	<0.050	<0.20	<0.20	<2,000	<0.0020	<0.20	<0.0020	<0.050	<1.0

Notes

< - Sample concentration less than the detection limit indicated.
--- - Sample not analyzed for indicated parameter.
1 - The rational supporting the Updated Screening Levels (USLs) for porewater and surface water is provided by SLR Consulting Canada Ltd. in their memorandum entitled Updated Screening Levels for Foreshore Monitoring including an Addendum, dated May 9 and June 6, 2013, respectively. A general hierarchy was developed for defining USLs as follows: First) BC Water Quality Guidelines (approved then working); Second) 1/10 CSR aquatic life marine standards (for porewater); and lastly, reference area concentration (which commonly defaults to the laboratory detection limit)
2 - Concentrations affected by seawater contained in the water sample.
3 - Sample IDs do not exactly match laboratory reports. They have been cleaned up for easy comparison of same location over time.
4 - On February 28, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps which was accepted by the MoE in their letter dated August 28, 2014.

BOLD	Sample concentration is detected
SHADE	Sample concentration greater than Updated Screening Level
SHADE	Sample concentration greater than Updated Screening Level and/or RBMT

Abbreviations
µg/L [ppb] - micrograms/litre [parts per billion]
m - metres

Acronyms
AG - Aquagate
ATB - well located in anchor trench barrier
BC AWQG - British Columbia Approved Water Quality Guidelines. Marine unless otherwise noted as FW (freshwater).
BC WWQG - British Columbia Working Water Quality Guidelines. Marine unless otherwise noted as FW (freshwater).
BIWQO - Burrard Inlet Water Quality Objectives
C - Compliance well (Post-construction)
CCME - Canadian Council of Ministers of the Environment (Updates to May 2008). Marine unless otherwise noted as FW (freshwater).
CS - well located cross slope
CSR/10 - Contaminated Sites Regulation (including up to Stage 11 amendments, November 2017) divided by ten (10)
D - dissolved metals
DS - well located down slope
EAZ - ecologically active zone
EB - eastern barrier
E FPTS - Eastern Foreshore Passive Treatment System
NA - not applicable
NBO - near bottom samples
NS - no standard established for indicated parameter
OB - well located within the original barrier
OC - organoclay
P - Performance well (Post-construction)
PAC - powder activated carbon
RBMT - risk based management target
S - Sentry well (Post-construction)
SW - surface water samples
T - total metals
U - Up gradient well (Post-construction)
USAT - well located up slope of anchor trench
WB - western barrier
W FPTS - Western Foreshore Passive Treatment System

Appendix B

Regulatory Context

Regulatory Context

Several provincial and federal regulatory agencies share authority for assessing and managing contaminated sites in British Columbia (BC). The agencies that have regulatory power include Fisheries and Oceans Canada (DFO), Environment Canada (EC), and the BC Ministry of Environment and Climate Change Strategy (ENV). The Parkland Burnaby Refinery is a tenant of the Port of Vancouver (POV), and is, therefore, also under the jurisdiction of the POV. POV operates under the *Canada Marine Act* and is a responsible agency under the *Canadian Environmental Assessment Act*. The BC ENV has taken the lead role in reviewing the remediation of the contamination at the Foreshore Site.

Federal statutes and regulations that apply to the Foreshore area marine sediment include:

- Canadian Environmental Protection Act, 1999 (S.C. 1999, c.33) and associated regulations;
- Canada Marine Act, 1998 (S.C. 1998, c.10) and associated regulations; and,
- Fisheries Act (R.S.C. 1985, c. F-14) and associated regulations.

Provincial statues and regulations that apply to the management of soil, groundwater, sediment and porewater quality include:

- BC Environmental Management Act (EMA) (S.B.C. 2003, c 53), effective July 8, 2004;
- Contaminates Sites Regulation (CSR), BC Reg. 375/96, effective April 1, 1997 (including Stage 13 amendments, February 1, 2021); and
- Hazardous Waste Regulation (HWR), BC Reg. 63/88, effective April 1, 1988 (including amendments up to B.C. Reg. 243/2016).

For surface water and porewater below the high-water mark, the BC ENV Approved and Working Water Quality Guidelines (WQG) for marine aquatic life apply.

CANADIAN ENVIRONMENTAL ASSESSMENT ACT

Section 67 of the *Canadian Environmental Assessment Act, 2012* requires federal authorities to determine that projects will not likely cause significant adverse environmental effects (or, if a project is likely to cause significant adverse environmental effects, requires the Governor in Council to decide whether those effects are justified in the circumstances). The Project and Environmental Review (PER) process provides that assurance. The Port Authority also considers other interests, impacts, and mitigation measures through the PER process.

CANADIAN ENVIRONMENTAL PROTECTION ACT

Within the federal government, the *Canadian Environmental Protection Act (CEPA)* is the primary element of the legislative framework for preventing pollution and protecting the environment and human health. In general, CEPA:

- Makes pollution prevention the cornerstone of national efforts to reduce toxic substances in the environment;
- Sets out processes to assess the risks to the environment and human health posed by substances in commerce (in use) or used for manufacturing purposes in Canada;
- Imposes time frames for managing toxic substances;
- Provides a wide range of tools to manage toxic substances, other pollution and wastes; and
- Ensures the most harmful substances are phased out or not released into the environment in any measurable quantity.

CANADIAN MARINE ACT

- The *Canada Marine Act (CMA)* created Canadian Port Authorities. The CMA allows POV, under the Port Authorities Operations Regulations, to provide authorization to complete works within its jurisdiction. The Foreshore Site is located within the jurisdiction of POV.

FISHERIES ACT

Under the authority of the *Fisheries Act*, DFO has decision-making authority for the conservation and protection of fish and fish habitat. The fish and fish habitat protection provisions of the Fisheries Act provide mechanisms to allow development of projects to occur while providing for the protection of fish and fish habitat.

The key sections within the act that directly apply to this project are:

- Section 35(1) of the Fisheries Act which prohibits the harmful alteration, disruption or destruction of fish habitat; and
- Section 36(3) of the Fisheries Act which prohibits the discharge of deleterious substances to water frequented by fish either directly or indirectly.

CONTAMINATED SITES REGULATION

The CSR under the EMA is the principal regulatory document defining requirements for contaminated sites management in BC. The CSR came into effect on April 1, 1997; thirteen amendments to the CSR have been completed since 1997, with the most recent being the Stage 13, which came into effect on February 1, 2021. The EMA and CSR have provisions for both the numerical standards and risk-based standards approaches to managing site contamination. They outline the procedures for site assessment, remediation and application for environmental closure for a property. Numerical standards are key components of the requirements in the CSR as they define whether or not a site is contaminated. Land Remediation staff of the ENV currently oversee the ongoing investigation and remediation.

Under the CSR, there are three types of numerical remediation standards. 1) The Generic Numerical Standards refer to concentrations of given substances in soil or water for a particular land use. 2) Matrix Numerical Standards are applied for some substances in soil, taking into account various site-specific factors such as proximity to receiving waters, likelihood of human ingestion, and use of land for livestock rearing. 3) Site-Specific Numerical Standards involve the generation of a standard for a specific site, based on a protocol outlined by BC ENV (Protocol 2).

The CSR is simplified into four new schedules:

- Schedule 3.1 – Part 1, Matrix Numerical Soil Standards;
- Schedule 3.1 – Part 2, Generic Numerical Soil Standards to Protect Human Health;
- Schedule 3.1 – Part 3, Generic Numerical Soil Standards to Protect Ecological Health;
- Schedule 3.2, Generic Numerical Water Standards;
- Schedule 3.3, Generic Numerical Vapour Standards; and
- Schedule 3.4, Generic Numerical Sediment Standards.

BC CSR PROTOCOL 11 UPPER CAP CONCENTRATIONS

This protocol sets the upper cap concentrations for substances with numerical standards in the CSR and which, when present in the exposure zone of soil, water, sediment or vapour, could pose high risks to the environment or human health. If upper cap concentrations are exceeded, an analysis of exposure pathways, under Protocol 12, usually must be carried out to determine if a site is classified as high risk.

APPLICABLE SCREENING LEVELS FOR WATER

GROUNDWATER

In accordance with BC CSR Protocol 21, standards for the protection of drinking water are applicable at sites either where groundwater is currently used as a drinking water source (current use) or could be used as a drinking water source (future use).

Current drinking water use is applicable at sites where drinking water wells or surface water intakes are present within a radial distance of 500 m from the outer extent of the groundwater contamination source. If the groundwater flow direction is reliably known, the distance is refined to drinking water wells or surface water intakes located 100 metres upgradient and 500 metres downgradient of the outer extent of the contamination source.

Future drinking water use is applicable at sites where the hydraulic conductivity is greater than 1×10^{-6} metres per second (m/s), has a yield greater than or equal to 1.3 litres per minute and where the natural concentration of total dissolved solids is less than 4,000 milligrams per litre (mg/L). Future drinking water use is applicable at sites where a saturated unit exists at depth that meets the above criteria and does not have a protective five metre thick confining unit with a bulk hydraulic conductivity less than 1×10^{-7} m/s that is continuous and unfractured[7]. Saturated geological units that are located within 500 metres of a marine and estuarine foreshore are considered to have unsuitable water quality for domestic water supply. In accordance with BC CSR Protocol 21, future drinking water use does not apply to the Foreshore Site.

The Foreshore Site is located on the foreshore of Burrard Inlet, in the north part of Burnaby where all properties are connected to the municipal potable water supply. There are no known drinking water wells in the vicinity of the Foreshore Site; therefore, there is no current drinking water use at, or in the vicinity of the Foreshore Site.

A letter requesting a drinking water standards exemption for Area 2 of the Refinery, located up-gradient of the Foreshore Site, was submitted to the British Columbia Ministry of Environment and Climate Change Strategy on December 19, 2011 and re-submitted on November 9, 2012. The drinking water exemption was provided by the BC ENV on May 15, 2017.

Standards for aquatic life water use apply to all groundwater located within 500 m of a surface water body containing aquatic life unless groundwater at the Foreshore Site flows to another surface water body located greater than 500 m from the source. Standards for aquatic life water use also apply where there is the potential for contaminated groundwater to flow through preferential corridors that discharge directly to a surface water body containing marine or freshwater aquatic life.

POREWATER

The MoE's January 24, 2011 letter outlined the previous screening standards applied to the Foreshore Site for porewater regardless of the depth (BC WQG or where they do not exist, 1/10 of the Schedule 6 CSR aquatic life [AW] Marine standard – see below for further details). For simplicity, surface water screening followed the same procedure as porewater.

Since surface water and porewater sampling locations are at the Foreshore Site (within 10 m of the high-water mark), the water screening cannot assume the dilution factor used in the development of CSR groundwater standards. Concentrations of potential contaminants of concern (PCOCs) reported in surface water and porewater samples are currently screened against Ambient BC WQG for marine waters. For PCOCs where BC WQG do not exist, 1/10 of the Schedule 6 CSR AW Marine standards were used for screening purposes. For contaminants with no BC WQG or 1/10 CSR AW standard, a reference site approach was used with background concentrations used for screening as described in Protocol 9. The Reference Area for water samples was the PR2 sampling location (Figure 1). If the background concentrations did not fall within a single statistical population, conservative estimates were used. The reference water concentrations for many PCOCs are below their respective standard laboratory reporting limit. In these cases, the laboratory reporting limit from the reference locations was considered the reference standard and used for this screening. An exception in using the 1/10 of the CSR AW standard

[7] BC Ministry of Environment, 2010. Technical Guidance 6. Water Use Determination. Victoria, BC. http://www.env.gov.bc.ca/epd/remediation/guidance/technical/pdf/tg06.pd

as the reference concentration is for $LEPH_w$. Since $LEPH_w$ does not have BC WQG standard and the common laboratory reporting limit is five times greater than 1/10 CSR AW standard, the reference location laboratory detection limit was used for $LEPH_w$ screening.

SITE SPECIFIC STANDARDS

In their memorandum dated May 9, 2013, SLR Consulting Canada Ltd. (SLR) proposed harmonizing the two sets of screening levels, i.e. those standards previously described in this section and the screening levels proposed by SLR in the problem formulation report (SLR, 2011). The rationale supporting the updated screening levels is provided by SLR in their memorandum entitled *Updated Screening Levels (USLs) for Foreshore Monitoring* including an addendum included as an appendix within the Foreshore 2012 Second Semi-Annual Report (URS, 2013). The USLs were deemed satisfactory by the MoE in email correspondence to SLR on September 4, 2013 (MoE, 2013). The porewater and surface water samples in this report were screened against the updated SLR screening levels with the exception of HEPHw.

The MoE's June 21, 2013 letter indicated that HEPHw is not a regulated parameter under the CSR and is, therefore, not normally characterized or otherwise assessed for the regulatory purposes of the CSR in groundwater or porewater. Therefore, porewater and surface water samples in this report were not screened against a standard for HEPHw.

On February 27, 2014, SLR submitted a Human Health and Ecological Risk Assessment (HHERA) to determine Risk-Based Management Targets (RBMTs) for PCOCs associated with the Foreshore seeps. The RBMTs were developed to be protective of aquatic plants and invertebrates at the community level and fish at the population level. The HHERA did not find any significant risk to human health; therefore, RBMTs were not needed for human receptors. In the HHERA, SLR derived RBMTs for the following PHCs and PAHs: BTEX, benzo(a)pyrene, naphthalene, VPH_w, and $LEPH_w$. In the HHERA, SLR derived RBMTs for only two metals, copper and zinc, which were identified as porewater PCOCs for the Foreshore Site (SLR, 2014b).

Appendix C

Analytical Laboratory Reports

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA21A3930**	Page	: 1 of 14
Amendment	: **1**		
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: (604) 444-6400	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 03-Mar-2021 19:15
PO	: 4222178	Date Analysis Commenced	: 04-Mar-2021
C-O-C number	: ----	Issue Date	: 16-Mar-2021 12:52
Sampler	: CXW/AAR/DB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 25		
No. of samples analysed	: 25		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Janice Leung	Supervisor - Organics Extractions	Organics, Burnaby, British Columbia
Jashan Kaur	Lab Assistant	Metals, Burnaby, British Columbia
Ken Chan	Supervisor - Metals Prep & Mercury	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Organics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*
DLCI	*Detection Limit Raised: Chromatographic interference due to co-elution.*
DLQ	*Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.*
SUR-ND	*Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.*

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-1_20210303|REG|GW	PW17-2_20210303|REG|GW	PW17-3_20210303|REG|GW	PW17-7_20210303|REG|GW	PW17-8_20210303|REG|GW
				Client sampling date / time	03-Mar-2021 15:53	03-Mar-2021 15:15	03-Mar-2021 14:57	03-Mar-2021 15:35	03-Mar-2021 15:24
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-001	VA21A3930-002	VA21A3930-003	VA21A3930-004	VA21A3930-005
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	2680	3150	3850	2480	3630
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00040	0.00051	0.00054	<0.00020	0.00043
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0017	<0.0010	0.0016	0.0016	<0.0010
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	94.8	99.6	98.9	96.6	94.7
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	106	102	106	106	106
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	90.1	87.6	86.4	84.1	88.5
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	71.4	115	111	103	79.5
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-1_20210303|REG|GW	PW17-2_20210303|REG|GW	PW17-3_20210303|REG|GW	PW17-7_20210303|REG|GW	PW17-8_20210303|REG|GW
				Client sampling date / time	03-Mar-2021 15:53	03-Mar-2021 15:15	03-Mar-2021 14:57	03-Mar-2021 15:35	03-Mar-2021 15:24
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-001	VA21A3930-002	VA21A3930-003	VA21A3930-004	VA21A3930-005
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.011	0.012	0.012	<0.010	<0.010
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	94.7	88.1	93.6	90.1	93.1
naphthalene-d8	1146-65-2	E641A	0.010	%	92.1	92.0	96.1	88.1	98.1
phenanthrene-d10	1517-22-2	E641A	0.010	%	99.2	97.5	102	95.3	107

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-9_20210303|REG|GW	PW17-10_20210303|REG|GW	PW17-11_20210303|REG|GW	PW17-12_20210303|REG|GW	PW17-13_20210303|REG|GW
				Client sampling date / time	03-Mar-2021 15:57	03-Mar-2021 15:39	03-Mar-2021 15:07	03-Mar-2021 14:51	03-Mar-2021 16:13
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-006	VA21A3930-007	VA21A3930-008	VA21A3930-009	VA21A3930-010
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	1960	3880	3280	4000	1980
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00143	0.00062	<0.00020	0.00043	0.00125
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	<0.0010	0.0019	<0.0010	<0.0010	0.0014
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	95.6	95.3	94.2	96.5	88.8
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	106	106	103	101	108
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	90.3	90.0	89.6	87.5	92.3
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	104	96.1	79.6	103	114
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	0.014	<0.010	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-9_20210303|REG|GW	PW17-10_20210303|REG|GW	PW17-11_20210303|REG|GW	PW17-12_20210303|REG|GW	PW17-13_20210303|REG|GW
				Client sampling date / time	03-Mar-2021 15:57	03-Mar-2021 15:39	03-Mar-2021 15:07	03-Mar-2021 14:51	03-Mar-2021 16:13
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-006	VA21A3930-007	VA21A3930-008	VA21A3930-009	VA21A3930-010
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.010	0.012	0.010	0.011	0.010
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	88.1	87.1	91.4	85.5	80.6
naphthalene-d8	1146-65-2	E641A	0.010	%	91.4	97.8	98.0	91.2	94.8
phenanthrene-d10	1517-22-2	E641A	0.010	%	101	104	109	100	96.5

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	PW17-14_2021 0303|REG|GW	PW17-15_2021 0303|REG|GW	PW17-19_2021 0303|REG|GW	PW17-20_2021 0303|REG|GW	PW17-21_2021 0303|REG|GW
Client sampling date / time					03-Mar-2021 15:51	03-Mar-2021 14:32	03-Mar-2021 13:56	03-Mar-2021 13:53	03-Mar-2021 16:46
					VA21A3930-011	VA21A3930-012	VA21A3930-013	VA21A3930-014	VA21A3930-015
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	2480	3480	2500	3180	263
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00051	0.00040	0.00024	0.00109	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	----	----	----	----	0.00043
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0018	<0.0010	0.0016	0.0026	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	----	----	----	----	<0.0020 DLA
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	8.23	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	106	104	100	101	105
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	104	100	96.8	99.2	101
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	87.1	91.3	87.0	85.9	93.8
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	88.6	124	108	63.1 SUR-ND	95.5
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	0.017
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-14_2021 0303|REG|GW	PW17-15_2021 0303|REG|GW	PW17-19_2021 0303|REG|GW	PW17-20_2021 0303|REG|GW	PW17-21_2021 0303|REG|GW
				Client sampling date / time	03-Mar-2021 15:51	03-Mar-2021 14:32	03-Mar-2021 13:56	03-Mar-2021 13:53	03-Mar-2021 16:46
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-011	VA21A3930-012	VA21A3930-013	VA21A3930-014	VA21A3930-015
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	0.012	<0.010	0.024
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.011	<0.010	0.012	0.014	0.028
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.110 DLQ
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.075 DLCI
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	84.3	89.9	89.2	89.0	87.6
naphthalene-d8	1146-65-2	E641A	0.010	%	93.2	94.1	93.3	91.3	96.3
phenanthrene-d10	1517-22-2	E641A	0.010	%	98.7	101	102	99.2	104

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-24_2021 0303|REG|GW	PW17-25_2021 0303|REG|GW	PW17-29_2021 0303|REG|GW	PW17-30_2021 0303|REG|GW	PW17-32_2021 0303|REG|GW
				Client sampling date / time	03-Mar-2021 16:12	03-Mar-2021 14:15	03-Mar-2021 16:30	03-Mar-2021 14:08	03-Mar-2021 16:48
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-016	VA21A3930-017	VA21A3930-018	VA21A3930-019	VA21A3930-020
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	1610	2890	2720	2470	2140
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00021	0.00068	0.00048	0.00076	0.00071
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	<0.0010	0.0015	0.0012	0.0011	0.0051
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	19.0	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	98.2	105	103	105	104
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	95.2	99.8	102	102	101
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	96.9	98.1	96.1	97.6	94.5
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	86.1	121	106	105	98.6
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-24_2021 0303|REG|GW	PW17-25_2021 0303|REG|GW	PW17-29_2021 0303|REG|GW	PW17-30_2021 0303|REG|GW	PW17-32_2021 0303|REG|GW
				Client sampling date / time	03-Mar-2021 16:12	03-Mar-2021 14:15	03-Mar-2021 16:30	03-Mar-2021 14:08	03-Mar-2021 16:48
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-016	VA21A3930-017	VA21A3930-018	VA21A3930-019	VA21A3930-020
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.011	0.013	0.012	0.012	0.014
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	93.2	96.6	93.4	94.1	116
naphthalene-d8	1146-65-2	E641A	0.010	%	83.7	96.7	79.5	73.7	77.0
phenanthrene-d10	1517-22-2	E641A	0.010	%	84.6	111	108	96.0	111

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-33_2021 0303|REG|GW	----	----	----	----
				Client sampling date / time	03-Mar-2021 13:53	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-021	--------	--------	--------	--------
					Result	----	----	----	----
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	2240	----	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00032	----	----	----	----
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0019	----	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	----	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	----	----	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	----	----	----	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	----	----	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	----	----	----	----
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	----	----	----	----
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	----	----	----	----
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	----	----	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	104	----	----	----	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	96.9	----	----	----	----
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----	----	----	----
VPHw	----	EC580A	100	µg/L	<100	----	----	----	----
LEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	94.9	----	----	----	----
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	118	----	----	----	----
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	----	----	----	----
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	----	----	----	----
acridine	260-94-6	E641A	0.010	µg/L	<0.010	----	----	----	----
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	----	----	----	----
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	----	----	----	----
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	----	----	----	----

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-33_2021 0303|REG|GW	----	----	----	----
				Client sampling date / time	03-Mar-2021 13:53	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-021	--------	--------	--------	--------
					Result	----	----	----	----
Polycyclic Aromatic Hydrocarbons									
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----	----	----	----
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	----	----	----	----
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	----	----	----	----
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	----	----	----	----
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	----	----	----	----
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	----	----	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	0.011	----	----	----	----
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.017	----	----	----	----
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	----	----	----	----
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	----	----	----	----
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	----	----	----	----
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	93.0	----	----	----	----
naphthalene-d8	1146-65-2	E641A	0.010	%	71.2	----	----	----	----
phenanthrene-d10	1517-22-2	E641A	0.010	%	81.8	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Water (Matrix: Water)				Client sample ID	R-Blank-1_2021 0303	T-Blank-1_2021 0303	T-Blank-2_2021 0303	T-Blank-3_2021 0303	----
				Client sampling date / time	03-Mar-2021	03-Mar-2021	03-Mar-2021	03-Mar-2021	----
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-022	VA21A3930-023	VA21A3930-024	VA21A3930-025	--------
					Result	Result	Result	Result	----
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	<0.60	----	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00020	----	----	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0010	----	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	----	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	----
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	104	103	102	104	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	94.5	98.4	99.5	96.5	----
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	----
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	----
LEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	99.1	----	----	----	----
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	109	107	122	109	----
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	----	----	----	----
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	----	----	----	----
acridine	260-94-6	E641A	0.010	µg/L	<0.010	----	----	----	----
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	----	----	----	----
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	----	----	----	----
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)				Client sample ID	R-Blank-1_20210303	T-Blank-1_20210303	T-Blank-2_20210303	T-Blank-3_20210303	----
				Client sampling date / time	03-Mar-2021	03-Mar-2021	03-Mar-2021	03-Mar-2021	----
Analyte	CAS Number	Method	LOR	Unit	VA21A3930-022	VA21A3930-023	VA21A3930-024	VA21A3930-025	--------
					Result	Result	Result	Result	----
Polycyclic Aromatic Hydrocarbons									
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	----	----	----	----
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	----	----	----	----
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	----	----	----	----
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	----	----	----	----
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	----	----	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.010	----	----	----	----
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	----	----	----	----
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	----	----	----	----
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	----	----	----	----
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	116	----	----	----	----
naphthalene-d8	1146-65-2	E641A	0.010	%	74.6	----	----	----	----
phenanthrene-d10	1517-22-2	E641A	0.010	%	102	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA21A3930**	Page	: 1 of 17
Amendment	: 1		
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 03-Mar-2021 19:15
PO	: 4222178	Issue Date	: 16-Mar-2021 12:52
C-O-C number	: ----		
Sampler	: CXW/AAR/DB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 25		
No. of samples analysed	: 25		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Test sample Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Regular Sample Surrogates

Sub-Matrix: **Pore Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Result	Limits	Comment
Samples Submitted							
Hydrocarbons Surrogates	VA21A3930-014	PW17-20_20210303|REG|GW	dichlorotoluene, 3,4-	97-75-0	63.1 %	70.0-130 %	Recovery less than lower data quality objective

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 15:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 15:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-1_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-10_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-11_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-12_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-13_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-14_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-15_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-19_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-2_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-20_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-24_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-25_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-29_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-3_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-30_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-32_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-33_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-7_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-8_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-9_20210303|REG|GW	E469S	03-Mar-2021	05-Mar-2021	180 days	1 days	✓	07-Mar-2021	178 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-21_20210303|REG|GW	E421	03-Mar-2021	04-Mar-2021	180 days	0 days	✓	04-Mar-2021	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) R-Blank-1_20210303	E421	03-Mar-2021	04-Mar-2021	180 days	0 days	✓	04-Mar-2021	179 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-1_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-10_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-11_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-12_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-13_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-14_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-2_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-3_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-7_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-8_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-9_20210303|REG|GW	E581.VH+F1	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-15_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓

Matrix: **Water**

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Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-19_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-20_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-21_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-24_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-25_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-29_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-30_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-32_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-33_20210303|REG|GW	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓

Matrix: **Water**

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Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) R-Blank-1_20210303	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) T-Blank-1_20210303	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) T-Blank-2_20210303	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) T-Blank-3_20210303	E581.VH+F1	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-1_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-10_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-11_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-12_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-13_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-14_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-15_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-19_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-2_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-20_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-21_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-3_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-7_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-8_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓

Matrix: **Water**

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Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-9_20210303|REG|GW	E641A	03-Mar-2021	10-Mar-2021	14 days	6 days	✓	10-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-24_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-25_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-29_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-30_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-32_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-33_20210303|REG|GW	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
R-Blank-1_20210303	E641A	03-Mar-2021	11-Mar-2021	14 days	7 days	✓	11-Mar-2021	40 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-1_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓

Matrix: **Water**

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Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-10_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-11_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-12_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-13_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-14_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-2_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-3_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-7_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-8_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓

Matrix: **Water**

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Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-9_20210303|REG|GW	E611A	03-Mar-2021	07-Mar-2021	14 days	3 days	✓	08-Mar-2021	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-15_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-19_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-20_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-21_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-24_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-25_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-29_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-30_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times: Rec	Holding Times: Actual	Eval	Analysis: Analysis Date	Holding Times: Rec	Holding Times: Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-32_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-33_20210303|REG|GW	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) R-Blank-1_20210303	E611A	03-Mar-2021	09-Mar-2021	14 days	5 days	✓	10-Mar-2021	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) T-Blank-1_20210303	E611A	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) T-Blank-2_20210303	E611A	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) T-Blank-3_20210303	E611A	03-Mar-2021	09-Mar-2021	14 days	6 days	✓	10-Mar-2021	7 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
BTEX by Headspace GC-MS	E611A	160713	2	31	6.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	158906	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	158517	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	160711	2	36	5.5	5.0	✓
Laboratory Control Samples (LCS)							
BC PHC - EPH by GC-FID	E601A	161711	2	27	7.4	5.0	✓
BTEX by Headspace GC-MS	E611A	160713	2	31	6.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	158906	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	158517	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	161712	2	38	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	160711	2	36	5.5	5.0	✓
Method Blanks (MB)							
BC PHC - EPH by GC-FID	E601A	161711	2	27	7.4	5.0	✓
BTEX by Headspace GC-MS	E611A	160713	2	31	6.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	158906	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	158517	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	161712	2	38	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	160711	2	36	5.5	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	160713	2	31	6.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	158906	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	158517	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	160711	2	36	5.5	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Seawater samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS (HMI Mode).
VH and F1 by Headspace GC-FID	E581.VH+F1 Vancouver - Environmental	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
BC PHC - EPH by GC-FID	E601A Vancouver - Environmental	Water	BC MOE Lab Manual	Extractable Petroleum Hydrocarbons (EPH) are analyzed by GC-FID.
BTEX by Headspace GC-MS	E611A Vancouver - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Vancouver - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Dissolved Hardness (Calculated)	EC100 Vancouver - Environmental	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
VPH: VH-BTEX-Styrene	EC580A Vancouver - Environmental	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH6-10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A Vancouver - Environmental	Water	BC MOE Lab Manual (LEPH and HEPH) (mod)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Vancouver - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
VOCs Preparation for Headspace Analysis	EP581 Vancouver - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Vancouver - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **VA21A3930**	Page	: 1 of 9
Amendment	: **1**		

Client	: AECOM Canada Ltd.	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 1000 - 2025 Willingdon Avenue Burnaby BC Canada V5C 0J3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 03-Mar-2021 19:15
PO	: 4222178	Date Analysis Commenced	: 04-Mar-2021
C-O-C number	: ----	Issue Date	: 16-Mar-2021 12:52
Sampler	: CXW/AAR/DB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 25		
No. of samples analysed	: 25		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits
- Reference Material (RM) Report; Recovery and Acceptance Limits
- Method Blank (MB) Report; Recovery and Acceptance Limits
- Laboratory Control Sample (LCS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Janice Leung	Supervisor - Organics Extractions	Organics, Burnaby, British Columbia
Jashan Kaur	Lab Assistant	Metals, Burnaby, British Columbia
Ken Chan	Supervisor - Metals Prep & Mercury	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percentage Difference
# = Indicates a QC result that did not meet the ALS DQO.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 158517)											
VA21A3923-001	Anonymous	copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0033	0.0033	0.00003	Diff <2x LOR	----
Dissolved Metals (QC Lot: 158906)											
VA21A3930-001	PW17-1_20210303|REG|GW	copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00040	0.00040	0.000009	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0017	0.0015	0.0002	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 159812)											
VA21A3794-001	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.40	µg/L	0.46	0.44	0.02	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.30	µg/L	0.36	0.31	0.05	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 160713)											
VA21A3930-012	PW17-15_20210303|REG|GW	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 159813)											
VA21A3930-001	PW17-1_20210303|REG|GW	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----
Hydrocarbons (QC Lot: 160711)											
VA21A3922-001	Anonymous	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 158517)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 158906)						
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 159812)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 160713)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 159813)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 160711)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Polycyclic Aromatic Hydrocarbons (QCLot: 161259)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 161259) - continued						
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----
Polycyclic Aromatic Hydrocarbons (QCLot: 161712)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 158517)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	105	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	110	80.0	120	----
Dissolved Metals (QCLot: 158906)									
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	0.25 mg/L	107	80.0	120	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	0.5 mg/L	106	80.0	120	----
Volatile Organic Compounds (QCLot: 159812)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	97.2	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	78.3	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	103	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	95.7	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	93.0	70.0	130	----
xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	85.2	70.0	130	----
Volatile Organic Compounds (QCLot: 160713)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	93.9	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	127	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	98.5	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	89.8	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	97.2	70.0	130	----
xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	95.8	70.0	130	----
Hydrocarbons (QCLot: 159813)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	99.4	70.0	130	----
Hydrocarbons (QCLot: 160711)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	88.9	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 161259)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	102	60.0	130	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	108	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	91.0	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	92.3	60.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 161259) - continued									
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	96.5	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	115	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	101	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	99.7	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	109	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	117	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	100.0	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	97.8	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	101	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	107	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	112	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	111	60.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 161712)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	98.3	60.0	130	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	103	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	112	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	88.5	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	91.8	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	96.1	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	100	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	93.1	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	107	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	106	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	100.0	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	90.1	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	79.5	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	109	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	112	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 158517)										
VA21A3923-001	Anonymous	copper, dissolved	7440-50-8	E421	0.0183 mg/L	0.02 mg/L	91.6	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.394 mg/L	0.4 mg/L	98.5	70.0	130	----
Dissolved Metals (QCLot: 158906)										
VA21A3930-001	PW17-1_20210303|REG|GW	copper, dissolved	7440-50-8	E469S	0.0372 mg/L	0.04 mg/L	93.1	70.0	130	----
		zinc, dissolved	7440-66-6	E469S	0.765 mg/L	0.8 mg/L	95.6	70.0	130	----
Volatile Organic Compounds (QCLot: 159812)										
VA21A3930-004	PW17-7_20210303|REG|GW	benzene	71-43-2	E611A	97.3 µg/L	100 µg/L	97.3	60.0	140	----
		ethylbenzene	100-41-4	E611A	78.2 µg/L	100 µg/L	78.2	60.0	140	----
		styrene	100-42-5	E611A	102 µg/L	100 µg/L	102	60.0	140	----
		toluene	108-88-3	E611A	96.0 µg/L	100 µg/L	96.0	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	190 µg/L	200 µg/L	95.2	60.0	140	----
		xylene, o-	95-47-6	E611A	85.5 µg/L	100 µg/L	85.5	60.0	140	----
Volatile Organic Compounds (QCLot: 160713)										
VA21A3930-013	PW17-19_20210303|REG|GW	benzene	71-43-2	E611A	93.5 µg/L	100 µg/L	93.5	60.0	140	----
		ethylbenzene	100-41-4	E611A	127 µg/L	100 µg/L	127	60.0	140	----
		styrene	100-42-5	E611A	99.8 µg/L	100 µg/L	99.8	60.0	140	----
		toluene	108-88-3	E611A	88.9 µg/L	100 µg/L	88.9	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	195 µg/L	200 µg/L	97.5	60.0	140	----
		xylene, o-	95-47-6	E611A	96.6 µg/L	100 µg/L	96.6	60.0	140	----
Hydrocarbons (QCLot: 159813)										
VA21A3930-002	PW17-2_20210303|REG|GW	VHw (C6-C10)	----	E581.VH+F1	4440 µg/L	6310 µg/L	70.3	60.0	140	----
Hydrocarbons (QCLot: 160711)										
VA21A3922-001	Anonymous	VHw (C6-C10)	----	E581.VH+F1	6220 µg/L	6310 µg/L	98.5	60.0	140	----

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division Vancouver
Work Order Reference
VA21A3930

Telephone : +1 604 253 4188

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A
☑ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax	leslie.southern@aecom.com
Email 2	justin.becker@aecom.com
Email 3	aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax	christopher.boys@parkland.ca
Email 2	leslie.southern@aecom.com

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Addit fees may apply to rush requests on weekends, statutory holidays and n routine tests

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contac

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only):

ALS Contact: Dean Watt

Sampler: CXW, AAR DB

Analysis Reques

Indicate Filtered (F), Preserved (P) or Filtered and Pre

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQ	SUSPECTED HAZARD (see
	PW17-1-20210303	03-Mar-21	15:53	Porewater	5	X	X	X	X	X			
	PW17-2-20210303		15:15			X	X	X	X	X			
	PW17-3_20210303		14:57			X	X	X	X	X			
	PW17-7_20210303		15:35			X	X	X	X	X			
	PW17-8_20210303		15:24			X	X	X	X	X			
	PW17-9_20210303		15:57			X	X	X	X	X			
	PW17-10_20210303		15:39			X	X	X	X	X			
	PW17-11_20210303		15:07			X	X	X	X	X			
	PW17-12_20210303		14:51			X	X	X	X	X			
	PW17-13_20210303		16:13			X	X	X	X	X			
	PW17-14_20210303		15:51			X	X	X	X	X			
	PW17-15_20210303		14:37			X	X	X	X	X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

T1: 15, 20, 25, 1, 2
T2: 19, R-1, 33, 3, 14, 21, 24, 7, 13
BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C			
			8			

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Justin Becker	Mar. 3, 2021	19:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
TC	MAR 03 2021	7:16

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Canada Toll Free: 1 800 668 9878

Page 2 of 3

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: leslie.southern@aecom.com

Email 2: justin.becker@aecom.com

Email 3: aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: christopher.boys@parkland.ca

Email 2: leslie.southern@aecom.com

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#:
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only):

ALS Contact: Dean Watt

Sampler: CHW + AAR, DB

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	PW17-19_20210303	03-Mar-03	13:56	Brewater	5	X	X	X	X	X			
	PW17-20_20210303		13:53			X	X	X	X	X			
	PW17-21_20210303		16:46			X	X	X	X				
	PW17-24_20210303		16:12			X	X	X	X	X			
	PW17-25_20210303		14:15			X	X	X	X	X			
	PW17-29_20210303		16:30			X	X	X	X	X			
	PW17-30_20210303		14:00			X	X	X	X	X			
	PW17-32_20210303		16:48			X	X	X	X	X			
	PW17-33_20210303		13:53			X	X	X	X	X			
	R-Blank-1_20210303		PM	Other	5	X	X	X	X				
	T-Blank-1_20210303		NA	Other	1	X							
	T-Blank-2_20210303		NA	Other	1	X							

Drinking Water (DW) Samples (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
			X		

SHIPMENT RELEASE (client use)

Released by: Justin Becker | Date: Mar. 3, 2021 | Time: 19:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: | Date: | Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: TC | Date: MAR 03 2021 | Time: 7:15

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax leslie.southern@aecom.com

Email 2 justin.becker@aecom.com

Email 3 aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax christopher.boys@parkland.ca

Email 2 leslie.southern@aecom.com

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#:
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only): ALS Contact: Dean Watt Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	T-Blank-3_20210303	03-Mar-21	N/A	Other	1	X							

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				8			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Justin Becker	Date: March 3, 2021	Time: 4:22	Received by:	Date:	Time:	Received by: TC	Date: MAR 03 2021	Time: 7:15

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA21A4107**	Page	: 1 of 10
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: (604) 444-6400	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 04-Mar-2021 18:25
PO	: 4222178	Date Analysis Commenced	: 05-Mar-2021
C-O-C number	: ----	Issue Date	: 16-Mar-2021 13:26
Sampler	: AAR, CXW, DB, JVB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Janice Leung	Supervisor - Organics Extractions	Organics, Burnaby, British Columbia
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Paul Cushing	Team Leader - Organics	Organics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*
DLCI	*Detection Limit Raised: Chromatographic interference due to co-elution.*
DLQ	*Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.*

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-4_20210304	PW17-5_20210304	PW17-6_20210304	PW17-16_20210304	PW17-17_20210304
				Client sampling date / time	04-Mar-2021 15:49	04-Mar-2021 15:40	04-Mar-2021 15:32	04-Mar-2021 14:54	04-Mar-2021 15:14
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-001	VA21A4107-002	VA21A4107-003	VA21A4107-004	VA21A4107-005
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	600	µg/L	----	----	----	1020000	214000
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	2330	1820	1750	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	<0.00020	0.00174	<0.00020	----	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	----	----	----	<0.00100 DLA	<0.00020
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0011	<0.0010	<0.0010	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	----	----	----	<0.0050 DLA	<0.0010
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	8.44	5.01
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	1.96	1.62
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	1330-20-7	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	88.7	83.1	81.9	86.4	85.2
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	110	104	99.6	103	94.2
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	560	320
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
VPHw	----	EC580A	100	µg/L	<100	<100	<100	550	310
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	99.0	96.9	93.0	97.7	93.5
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	110	92.2	113	103	100
Polycyclic Aromatic Hydrocarbons									

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-4_20210304	PW17-5_20210304	PW17-6_20210304	PW17-16_20210304	PW17-17_20210304
				Client sampling date / time	04-Mar-2021 15:49	04-Mar-2021 15:40	04-Mar-2021 15:32	04-Mar-2021 14:54	04-Mar-2021 15:14
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-001	VA21A4107-002	VA21A4107-003	VA21A4107-004	VA21A4107-005
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.203	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.023 DLCI	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.223	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	1.39	0.017
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.010	0.014	<0.010	<0.021 DLCI	0.015
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.700 DLQ	<0.210 DLQ
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<1.06 DLCI	<0.200 DLCI
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	74.5	70.9	74.6	78.9	71.3
naphthalene-d8	1146-65-2	E641A	0.010	%	95.8	99.0	93.6	93.7	89.7
phenanthrene-d10	1517-22-2	E641A	0.010	%	97.4	99.0	94.1	98.9	87.4

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-18_2021 0304	PW17-22_2021 0304	PW17-23_2021 0304	PW17-26_2021 0304	PW17-27_2021 0304
				Client sampling date / time	04-Mar-2021 15:33	04-Mar-2021 15:00	04-Mar-2021 15:15	04-Mar-2021 15:38	04-Mar-2021 15:10
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-006	VA21A4107-007	VA21A4107-008	VA21A4107-009	VA21A4107-010
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	600	µg/L	448000	443000	141000	53700	229000
Dissolved Metals									
copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00040 DLA	0.00112	0.00038	<0.00020	0.00075
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0020 DLA	<0.0010	<0.0010	<0.0010	<0.0010
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	1330-20-7	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	86.6	86.3	82.9	83.4	81.8
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	109	96.8	110	110	110
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	96.3	89.7	93.1	97.3	94.1
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	99.6	108	89.9	114	102
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.023	<0.010

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-18_20210304	PW17-22_20210304	PW17-23_20210304	PW17-26_20210304	PW17-27_20210304
				Client sampling date / time	04-Mar-2021 15:33	04-Mar-2021 15:00	04-Mar-2021 15:15	04-Mar-2021 15:38	04-Mar-2021 15:10
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-006	VA21A4107-007	VA21A4107-008	VA21A4107-009	VA21A4107-010
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.014	0.011	<0.010	0.014	0.016
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	0.062	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	81.2	67.6	74.7	76.2	76.3
naphthalene-d8	1146-65-2	E641A	0.010	%	101	91.2	96.1	102	97.7
phenanthrene-d10	1517-22-2	E641A	0.010	%	102	87.6	96.5	103	94.5

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Pore Water (Matrix: Water)				Client sample ID	PW17-28_20210304	PW17-31_20210304	Dup-1_20210304	Dup-2_20210304	Dup-3_20210304
				Client sampling date / time	04-Mar-2021 15:02	04-Mar-2021 14:40	04-Mar-2021	04-Mar-2021	04-Mar-2021
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-011	VA21A4107-012	VA21A4107-013	VA21A4107-014	VA21A4107-015
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	600	µg/L	64400	----	53900	222000	1030000
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	----	985	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	----	0.00050	----	----	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00028	----	<0.00020	0.00075	<0.00100 DLA
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	----	0.0011	----	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0010	----	<0.0010	<0.0010	<0.0050 DLA
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	8.47
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	1.97
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	1330-20-7	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	81.5	82.9	84.6	84.4	80.8
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	101	98.0	109	100	101
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	280
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	560
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	280
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	550
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	97.5	96.2	95.7	96.1	96.6
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	106	110	102	103	99.1
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	0.205

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-28_20210304	PW17-31_20210304	Dup-1_20210304	Dup-2_20210304	Dup-3_20210304
				Client sampling date / time	04-Mar-2021 15:02	04-Mar-2021 14:40	04-Mar-2021	04-Mar-2021	04-Mar-2021
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-011	VA21A4107-012	VA21A4107-013	VA21A4107-014	VA21A4107-015
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.025 DLCI
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	0.036	0.023	<0.010	<0.011 DLQ
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	0.212
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	1.39
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.012	0.011	0.012	0.013	<0.016 DLCI
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.670 DLQ
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.075 DLCI	<0.050	<1.20 DLCI
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	76.9	74.9	73.3	70.7	75.3
naphthalene-d8	1146-65-2	E641A	0.010	%	102	96.7	96.6	97.6	91.0
phenanthrene-d10	1517-22-2	E641A	0.010	%	99.9	96.1	97.1	93.1	92.7

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	R-Blank-2_20210304	Travel Blank-4_20210304	Travel Blank-5_20210304	----	----
				Client sampling date / time	04-Mar-2021	04-Mar-2021	04-Mar-2021	----	----
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-016	VA21A4107-017	VA21A4107-018	--------	--------
					Result	Result	Result	----	----
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	600	µg/L	<600	----	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00020	----	----	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0010	----	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	----	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	<0.40	----	----
xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	<0.30	----	----
xylenes, total	1330-20-7	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	79.0	81.6	87.8	----	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	100	105	98.2	----	----
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	----	----	----	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----	----	----	----
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	----	----
HEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
LEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
VPHw	----	EC580A	100	µg/L	<100	<100	<100	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	99.0	----	----	----	----
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	103	105	118	----	----
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	----	----	----	----
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	----	----	----	----
acridine	260-94-6	E641A	0.010	µg/L	<0.010	----	----	----	----
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	----	----	----	----

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	R-Blank-2_20210304	Travel Blank-4_20210304	Travel Blank-5_20210304	----	----
				Client sampling date / time	04-Mar-2021	04-Mar-2021	04-Mar-2021	----	----
Analyte	CAS Number	Method	LOR	Unit	VA21A4107-016	VA21A4107-017	VA21A4107-018	--------	--------
					Result	Result	Result	----	----
Polycyclic Aromatic Hydrocarbons									
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	----	----	----	----
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----	----	----	----
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	----	----	----	----
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	----	----	----	----
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	----	----	----	----
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	----	----	----	----
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	----	----	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.011	----	----	----	----
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	----	----	----	----
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	----	----	----	----
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	----	----	----	----
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	79.7	----	----	----	----
naphthalene-d8	1146-65-2	E641A	0.010	%	101	----	----	----	----
phenanthrene-d10	1517-22-2	E641A	0.010	%	102	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA21A4107**	Page	: 1 of 15
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 04-Mar-2021 18:25
PO	: 4222178	Issue Date	: 16-Mar-2021 13:26
C-O-C number	: ----		
Sampler	: AAR, CXW, DB, JVB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 15:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 15:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-31_20210304	E469S	04-Mar-2021	08-Mar-2021	180 days	3 days	✓	08-Mar-2021	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-4_20210304	E469S	04-Mar-2021	08-Mar-2021	180 days	3 days	✓	08-Mar-2021	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-5_20210304	E469S	04-Mar-2021	08-Mar-2021	180 days	3 days	✓	08-Mar-2021	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-6_20210304	E469S	04-Mar-2021	08-Mar-2021	180 days	3 days	✓	08-Mar-2021	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) Dup-1_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) Dup-2_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) Dup-3_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-16_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-17_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-18_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-22_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-23_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-26_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-27_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) PW17-28_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) R-Blank-2_20210304	E421	04-Mar-2021	05-Mar-2021	180 days	1 days	✓	06-Mar-2021	178 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
Dup-1_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
Dup-2_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
Dup-3_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-16_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-17_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-18_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-22_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-23_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-26_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times: Rec	Holding Times: Actual	Eval	Analysis: Analysis Date	Holding Times: Rec	Holding Times: Actual	Eval
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-27_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-28_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-31_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-4_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-5_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-6_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
R-Blank-2_20210304	E601A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	13-Mar-2021	40 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
Dup-1_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-16_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times: Rec	Holding Times: Actual	Eval	Analysis: Analysis Date	Holding Times: Rec	Holding Times: Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-17_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-18_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-22_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-23_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-26_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-27_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-28_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-31_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-4_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-5_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-6_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) Dup-2_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) Dup-3_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) R-Blank-2_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) Travel Blank-4_20210304	E581.VH+F1	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) Travel Blank-5_20210304	E581.VH+F1	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	5 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) Dup-1_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) Dup-2_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
Dup-3_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-16_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-17_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-18_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-22_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-23_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-26_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-27_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-28_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-31_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-4_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-5_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-6_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
R-Blank-2_20210304	E641A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	40 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
Dup-1_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-16_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-17_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-18_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-22_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-23_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-26_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-27_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-28_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-31_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-4_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-5_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-6_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	6 days	✓	12-Mar-2021	7 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) Dup-2_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) Dup-3_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) R-Blank-2_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) Travel Blank-4_20210304	E611A	04-Mar-2021	11-Mar-2021	14 days	7 days	✓	12-Mar-2021	6 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) Travel Blank-5_20210304	E611A	04-Mar-2021	12-Mar-2021	14 days	8 days	✓	12-Mar-2021	5 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
BTEX by Headspace GC-MS	E611A	162224	2	27	7.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	160123	1	8	12.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	159330	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	162225	2	29	6.9	5.0	✓
Laboratory Control Samples (LCS)							
BC PHC - EPH by GC-FID	E601A	162721	1	20	5.0	5.0	✓
BTEX by Headspace GC-MS	E611A	162224	2	27	7.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	160123	1	8	12.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	159330	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	162722	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	162225	2	29	6.9	5.0	✓
Method Blanks (MB)							
BC PHC - EPH by GC-FID	E601A	162721	1	20	5.0	5.0	✓
BTEX by Headspace GC-MS	E611A	162224	2	27	7.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	160123	1	8	12.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	159330	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	162722	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	162225	2	29	6.9	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	162224	2	27	7.4	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	160123	1	8	12.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	159330	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	162225	2	29	6.9	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Seawater samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS (HMI Mode).
VH and F1 by Headspace GC-FID	E581.VH+F1 Vancouver - Environmental	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
BC PHC - EPH by GC-FID	E601A Vancouver - Environmental	Water	BC MOE Lab Manual	Extractable Petroleum Hydrocarbons (EPH) are analyzed by GC-FID.
BTEX by Headspace GC-MS	E611A Vancouver - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Vancouver - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Dissolved Hardness (Calculated)	EC100 Vancouver - Environmental	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
VPH: VH-BTEX-Styrene	EC580A Vancouver - Environmental	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH6-10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A Vancouver - Environmental	Water	BC MOE Lab Manual (LEPH and HEPH) (mod)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Vancouver - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
VOCs Preparation for Headspace Analysis	EP581 Vancouver - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Vancouver - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **VA21A4107**	Page	: 1 of 8
Client	: AECOM Canada Ltd.	Laboratory	: Vancouver - Environmental
Contact	: Leslie Southern	Account Manager	: Dean Watt
Address	: 1000 - 2025 Willingdon Avenue Burnaby BC Canada V5C 0J3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60653584/15405	Date Samples Received	: 04-Mar-2021 18:25
PO	: 4222178	Date Analysis Commenced	: 05-Mar-2021
C-O-C number	: ----	Issue Date	: 16-Mar-2021 13:27
Sampler	: AAR, CXW, DB, JVB		
Site	: Burnaby Refinery		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits
- Reference Material (RM) Report; Recovery and Acceptance Limits
- Method Blank (MB) Report; Recovery and Acceptance Limits
- Laboratory Control Sample (LCS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Janice Leung	Supervisor - Organics Extractions	Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Paul Cushing	Team Leader - Organics	Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percentage Difference
# = Indicates a QC result that did not meet the ALS DQO.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 159330)											
VA21A4090-006	Anonymous	copper, dissolved	7440-50-8	E421	0.00100	mg/L	<0.00100	<0.00100	0	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 160123)											
VA21A4172-001	Anonymous	copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00189	0.00186	0.00003	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0041	0.0036	0.0005	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 161694)											
VA21A4089-001	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 162224)											
VA21A4107-018	Travel Blank-5_20210304	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 161693)											
VA21A4089-001	Anonymous	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----
Hydrocarbons (QC Lot: 162225)											
VA21A4107-018	Travel Blank-5_20210304	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 159330)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 160123)						
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 161694)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 162224)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 161693)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 162225)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 162721)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 162722)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 162722) - continued						
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 159330)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.0	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	96.4	80.0	120	----
Dissolved Metals (QCLot: 160123)									
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	0.25 mg/L	110	80.0	120	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	0.5 mg/L	110	80.0	120	----
Volatile Organic Compounds (QCLot: 161694)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	102	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	84.8	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	99.4	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	90.6	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	115	70.0	130	----
xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	96.3	70.0	130	----
Volatile Organic Compounds (QCLot: 162224)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	103	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	94.3	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	110	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	85.5	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	116	70.0	130	----
xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	102	70.0	130	----
Hydrocarbons (QCLot: 161693)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	89.8	70.0	130	----
Hydrocarbons (QCLot: 162225)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	93.6	70.0	130	----
Hydrocarbons (QCLot: 162721)									
EPH (C10-C19)	----	E601A	250	µg/L	6491 µg/L	98.5	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3363 µg/L	95.3	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 162722)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	101	60.0	130	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	103	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 162722) - continued									
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	95.9	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	88.8	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	90.8	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	101	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	92.7	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	103	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	106	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	107	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	93.5	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	92.8	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	95.2	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	108	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	113	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 159330)										
VA21A4090-006	Anonymous	copper, dissolved	7440-50-8	E421	0.0970 mg/L	0.1 mg/L	97.0	70.0	130	----
		zinc, dissolved	7440-66-6	E421	1.98 mg/L	2 mg/L	99.1	70.0	130	----
Dissolved Metals (QCLot: 160123)										
VA21A4172-001	Anonymous	copper, dissolved	7440-50-8	E469S	0.0369 mg/L	0.04 mg/L	92.3	70.0	130	----
		zinc, dissolved	7440-66-6	E469S	0.747 mg/L	0.8 mg/L	93.4	70.0	130	----
Volatile Organic Compounds (QCLot: 161694)										
VA21A4089-003	Anonymous	benzene	71-43-2	E611A	83.1 µg/L	100 µg/L	83.1	60.0	140	----
		ethylbenzene	100-41-4	E611A	76.0 µg/L	100 µg/L	76.0	60.0	140	----
		styrene	100-42-5	E611A	93.6 µg/L	100 µg/L	93.6	60.0	140	----
		toluene	108-88-3	E611A	79.7 µg/L	100 µg/L	79.7	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	264 µg/L	200 µg/L	132	60.0	140	----
		xylene, o-	95-47-6	E611A	87.7 µg/L	100 µg/L	87.7	60.0	140	----
Volatile Organic Compounds (QCLot: 162224)										
VA21A4125-001	Anonymous	benzene	71-43-2	E611A	ND µg/L	2000 µg/L	ND	60.0	140	----
		ethylbenzene	100-41-4	E611A	2690 µg/L	2000 µg/L	135	60.0	140	----
		styrene	100-42-5	E611A	114 µg/L	100 µg/L	114	60.0	140	----
		toluene	108-88-3	E611A	1930 µg/L	2000 µg/L	96.4	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	4540 µg/L	4000 µg/L	113	60.0	140	----
		xylene, o-	95-47-6	E611A	2170 µg/L	2000 µg/L	108	60.0	140	----
Hydrocarbons (QCLot: 161693)										
VA21A4089-002	Anonymous	VHw (C6-C10)	----	E581.VH+F1	5220 µg/L	6310 µg/L	82.7	60.0	140	----
Hydrocarbons (QCLot: 162225)										
VA21A4107-018	Travel Blank-5_20210304	VHw (C6-C10)	----	E581.VH+F1	5740 µg/L	6310 µg/L	90.9	60.0	140	----

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Page 1 of 2

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: leslie.southern@aecom.com

Email 2: justin.becker@aecom.com

Email 3: aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: christopher.boys@parkland.ca

Email 2: leslie.southern@aecom.com

Tumaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:		PO#:	
Major/Minor Code:		Routing Code:	
Requisitioner:			
Location:			

ALS Lab Work Order # (ALS use only): 4107

ALS Contact: Dean Watt

Sampler: JUB + AAR + CKW + PB

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	PW17-4_20210304	04-Mar-21	15:44	Porewater	5	X	X	X	X	X			
	PW17-5_20210304		15:40			X	X	X	X	X			
	PW17-6_20210304		15:32			X	X	X	X	X			
	PW17-16_20210304		14:54			X	X	X	X				
	PW17-17_20210304		15:14			X	X	X	X				
	PW17-18_20210304		15:33			X	X	X	X				
	PW17-22_20210304		1500			X	X	X	X				
	PW17-23_20210304		15:15			X	X	X	X				
	PW17-26_20210304		15:38			X	X	X	X				
	PW17-27_20210304		15:10			X	X	X	X				
	PW17-28_20210304		15:02			X	X	X	X				
	PW17-31_20210304		14:40			X	X	X	X	X			

Environmental Division Vancouver
Work Order Reference
VA21A4107
Telephone : + 1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

T-4 : DUP-1, DUP-2, DUP-3, 16, 27, 26, 31, 5

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				8			

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Justin Becker	March 4, 2021	18:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
TC	MAR 04 2021	0:25

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Page 1 of 2

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: leslie.southern@aecom.com

Email 2: justin.becker@aecom.com

Email 3: aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: christopher.boys@parkland.ca

Email 2: leslie.southern@aecom.com

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#:
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only): 4107

ALS Contact: Dean Watt

Sampler: JOB + AAR + CTW + PB

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	PW17-4_20210304	04-Mar-21	15:49	Porewater	5	X	X	X	X	X			
	PW17-5_20210304		15:40			X	X	X	X	X			
	PW17-6_20210304		15:32			X	X	X	X	X			
	PW17-16_20210304		14:54			X	X	X	X				
	PW17-17_20210304		15:14			X	X	X	X				
	PW17-18_20210304		15:33			X	X	X	X				
	PW17-22_20210304		1500			X	X	X	X				
	PW17-23_20210304		15:15			X	X	X	X				
	PW17-26_20210304		15:38			X	X	X	X				
	PW17-27_20210304		15:10			X	X	X	X				
	PW17-28_20210304		15:02			X	X	X	X				
	PW17-31_20210304		14:40			X	X	X	X	X			

Environmental Division Vancouver
Work Order Reference
VA21A4107
Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

T-4 : DUP-1, DUP-2, DUP-3, 16, 27, 26, 31, 5

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				8			

SHIPMENT RELEASE (client use)

Released by: Justin Becker Date: March 4, 2021 Time: 18:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: TC Date: MAR 04 2021 Time: 0:25

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Page 1 of 2

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: leslie.southern@aecom.com

Email 2: justin.becker@aecom.com

Email 3: aaron.rysdale@aecom.com

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: christopher.boys@parkland.ca

Email 2: leslie.southern@aecom.com

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #:	
Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#:
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only): 4107

ALS Contact: Dean Watt

Sampler: JOB + AAR + CTW + PB

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/Styrene/VPH (P)	LEPH, benzo(a)pyrene, napthalene (P)	Dissolved Copper/Dissolved Zinc (F/P)	Hardness (all metals samples)	Brackish Water	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	PW17-4_20210304	04-Mar-21	15:49	Porewater	5	X	X	X	X	X			
	PW17-5_20210304		15:40			X	X	X	X	X			
	PW17-6_20210304		15:32			X	X	X	X	X			
	PW17-16_20210304		14:54			X	X	X	X				
	PW17-17_20210304		15:14			X	X	X	X				
	PW17-18_20210304		15:33			X	X	X	X				
	PW17-22_20210304		1500			X	X	X	X				
	PW17-23_20210304		15:15			X	X	X	X				
	PW17-26_20210304		15:38			X	X	X	X				
	PW17-27_20210304		15:10			X	X	X	X				
	PW17-28_20210304		15:02			X	X	X	X				
	PW17-31_20210304		14:40			X	X	X	X	X			

Environmental Division Vancouver
Work Order Reference
VA21A4107
Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below - (Excel COC only)

T-4 : DUP-1, DUP-2, DUP-3, 16, 27, 26, 31, 5

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				8			

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Justin Becker	March 4, 2021	18:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
TC	MAR 04 2021	0:25

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

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Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Page 2 of 2

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

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Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	Parkland Refinery (B.C.) Ltd.
Contact:	Christopher Boys

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

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☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

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Job #:	60653584 / 15405
PO / AFE:	
LSD:	Burnaby Refinery

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#:
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only):

ALS Contact: Dean Watt

Sampler: JVB+ AAR+ CXW+ DB

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

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	DUP-1_20210304	04-Mar-21	PM	Porewater	5	X	X	X	X				
	DUP-2_20210304	↓	PM	↓	5	X	X	X	X				
	DUP-3_20210304	↓	PM	↓	5	X	X	X	X				
	R-Blank-2_20210304	↓	N/A	↓	5	X	X	X	X				
	T-Blank-4_20210304	↓	N/A	↓	1	X							
	T-Blank-5_20210304	↓	N/A	↓	1	X							

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO

Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

BC CSR

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Justin Becker	March 4, 2021	18:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
TC	MAR 04 2021	6:25

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA20C2850**	Page	: 1 of 6
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: (604) 444-6400	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 08-Dec-2020 23:05
PO	: 4222178	Date Analysis Commenced	: 09-Dec-2020
C-O-C number	: 17-864639	Issue Date	: 17-Dec-2020 17:33
Sampler	: CXW + ARR		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Harsha Attanayake	Laboratory Analyst	Organics, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in reports identified as "Preliminary Report" are considered authorized for use.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*
SUR-ND	*Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.*

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-1_20201208|REG|GW Brackish Water	PW17-2_20201208|REG|GW Brackish Water	PW17-13_20201208|REG|GW Brackish Water	PW17-14_20201208|REG|GW Brackish Water	PW17-19_20201208|REG|GW Brackish Water
				Client sampling date / time	08-Dec-2020 18:20	08-Dec-2020 18:30	08-Dec-2020 19:23	08-Dec-2020 19:42	08-Dec-2020 19:19
Analyte	CAS Number	Method	LOR	Unit	VA20C2850-001	VA20C2850-002	VA20C2850-003	VA20C2850-004	VA20C2850-005
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	2030	2400	854	2830	2630
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00044	0.00066	0.00205	0.00056	0.00148
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0021	0.0012	<0.0010	0.0034	0.0022
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	7.80
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	111	114	109	111	107
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	105	111	110	101	110
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	99.2	89.1	92.3	86.5	96.3
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	84.9	96.8	99.4	85.3	84.8
Polycyclic Aromatic Hydrocarbons									
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	0.0256	<0.0050	<0.0050	<0.0050	<0.0050
naphthalene	91-20-3	E641A	0.050	µg/L	0.054	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	107	109	107	107	116
chrysene-d12	1719-03-5	E641A	0.010	%	123	128	130	126	134 SUR-ND

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-1_20201208|REG|GW Brackish Water	PW17-2_20201208|REG|GW Brackish Water	PW17-13_20201208|REG|GW Brackish Water	PW17-14_20201208|REG|GW Brackish Water	PW17-19_20201208|REG|GW Brackish Water
				Client sampling date / time	08-Dec-2020 18:20	08-Dec-2020 18:30	08-Dec-2020 19:23	08-Dec-2020 19:42	08-Dec-2020 19:19
Analyte	CAS Number	Method	LOR	Unit	VA20C2850-001	VA20C2850-002	VA20C2850-003	VA20C2850-004	VA20C2850-005
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons Surrogates									
naphthalene-d8	1146-65-2	E641A	0.010	%	91.9	91.6	93.6	91.1	98.9
phenanthrene-d10	1517-22-2	E641A	0.010	%	104	104	106	105	112

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-24_2020 1208|REG|GW Brackish Water	PW17-29_2020 1208|REG|GW Brackish Water	PW17-31_2020 1208|REG|GW	PW17-32_2020 1208|REG|GW Brackish Water	R-Blank-1_2020 1208
				Client sampling date / time	08-Dec-2020 19:07	08-Dec-2020 20:13	08-Dec-2020 20:36	08-Dec-2020 20:39	08-Dec-2020 21:58
Analyte	CAS Number	Method	LOR	Unit	VA20C2850-006	VA20C2850-007	VA20C2850-008	VA20C2850-009	VA20C2850-010
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	1890	3360	733	2130	<0.60
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00026	<0.00020	----	0.00159	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	----	----	<0.00100 DLA	----	<0.00020
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0017	0.0016	----	0.0049	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	----	----	<0.0050 DLA	----	<0.0010
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	5.33	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	105	110	108	108	111
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	106	112	111	109	106
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	88.6	85.4	93.9	81.7	80.9
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	81.7	93.5	88.3	84.1	82.2
Polycyclic Aromatic Hydrocarbons									
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	106	106	109	99.4	94.3

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-24_2020 1208|REG|GW Brackish Water	PW17-29_2020 1208|REG|GW Brackish Water	PW17-31_2020 1208|REG|GW	PW17-32_2020 1208|REG|GW Brackish Water	R-Blank-1_2020 1208
				Client sampling date / time	08-Dec-2020 19:07	08-Dec-2020 20:13	08-Dec-2020 20:36	08-Dec-2020 20:39	08-Dec-2020 21:58
Analyte	CAS Number	Method	LOR	Unit	VA20C2850-006	VA20C2850-007	VA20C2850-008	VA20C2850-009	VA20C2850-010
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons Surrogates									
chrysene-d12	1719-03-5	E641A	0.010	%	124	124	129	123	117
naphthalene-d8	1146-65-2	E641A	0.010	%	95.0	93.2	100	92.6	92.9
phenanthrene-d10	1517-22-2	E641A	0.010	%	106	104	109	103	99.0

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	TRAVEL BLANK-1	----	----	----	----
				Client sampling date / time	08-Dec-2020	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	VA20C2850-011	--------	--------	--------	--------
					Result	----	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	----	----	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	----	----	----	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	----	----	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	----	----	----	----
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	----	----	----	----
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	----	----	----	----
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	----	----	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	110	----	----	----	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	112	----	----	----	----
Hydrocarbons									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----	----	----	----
VPHw	----	EC580A	100	µg/L	<100	----	----	----	----
Hydrocarbons Surrogates									
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	86.2	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA20C2850**	Page	: 1 of 11
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 08-Dec-2020 23:05
PO	: 4222178	Issue Date	: 17-Dec-2020 17:33
C-O-C number	: 17-864639		
Sampler	: CXW + ARR		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Test sample Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Regular Sample Surrogates

Sub-Matrix: **Pore Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Result	Limits	Comment
Samples Submitted							
Polycyclic Aromatic Hydrocarbons Surrogates	VA20C2850-005	PW17-19_20201208|REG| GW Brackish Water	chrysene-d12	1719-03-5	134 %	60.0-130 %	Recovery greater than upper data quality objective

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 15:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 15:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-1_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-13_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-14_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-19_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-2_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-24_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-29_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid)										
PW17-32_20201208|REG|GW - Brackish Water	E469S	08-Dec-2020	09-Dec-2020	180 days	0 days	✓	09-Dec-2020	179 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-31_20201208|REG|GW	E421	08-Dec-2020	09-Dec-2020	180 days	1 days	✓	10-Dec-2020	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
R-Blank-1_20201208	E421	08-Dec-2020	14-Dec-2020	180 days	5 days	✓	15-Dec-2020	174 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-1_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-13_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-14_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-19_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-2_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-24_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-29_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-31_20201208|REG|GW	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-32_20201208|REG|GW - Brackish Water	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
R-Blank-1_20201208	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
TRAVEL BLANK-1	E581.VH+F1	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
R-Blank-1_20201208	E641A	08-Dec-2020	11-Dec-2020	14 days	2 days	✓	12-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-1_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-13_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-14_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-19_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-2_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-24_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-29_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-31_20201208|REG|GW	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-32_20201208|REG|GW - Brackish Water	E641A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	13-Dec-2020	40 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-1_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-13_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-14_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-19_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-2_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-24_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-29_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-31_20201208|REG|GW	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-32_20201208|REG|GW - Brackish Water	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) R-Blank-1_20201208	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) TRAVEL BLANK-1	E611A	08-Dec-2020	12-Dec-2020	14 days	3 days	✓	12-Dec-2020	10 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
BTEX by Headspace GC-MS	E611A	129848	1	20	5.0	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	128228	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130628	2	34	5.8	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	129849	1	18	5.5	5.0	✓
Laboratory Control Samples (LCS)							
BC PHC - EPH by GC-FID	E601A	129929	2	29	6.9	5.0	✓
BTEX by Headspace GC-MS	E611A	129848	1	20	5.0	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	128228	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130628	2	34	5.8	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	129928	2	24	8.3	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	129849	1	18	5.5	5.0	✓
Method Blanks (MB)							
BC PHC - EPH by GC-FID	E601A	129929	2	29	6.9	5.0	✓
BTEX by Headspace GC-MS	E611A	129848	1	20	5.0	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	128228	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130628	2	34	5.8	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	129928	2	24	8.3	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	129849	1	18	5.5	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	129848	1	20	5.0	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	128228	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130628	2	34	5.8	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	129849	1	18	5.5	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Seawater samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS (HMI Mode).
VH and F1 by Headspace GC-FID	E581.VH+F1 Vancouver - Environmental	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
BC PHC - EPH by GC-FID	E601A Vancouver - Environmental	Water	BC MOE Lab Manual	Extractable Petroleum Hydrocarbons (EPH) are analyzed by GC-FID.
BTEX by Headspace GC-MS	E611A Vancouver - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Vancouver - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Dissolved Hardness (Calculated)	EC100 Vancouver - Environmental	Water	APHA 2340B	"Hardness (as CaCO3), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
VPH: VH-BTEX-Styrene	EC580A Vancouver - Environmental	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH6-10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A Vancouver - Environmental	Water	BC MOE Lab Manual (LEPH and HEPH) (mod)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Vancouver - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
VOCs Preparation for Headspace Analysis	EP581 Vancouver - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Vancouver - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **VA20C2850**	Page	: 1 of 6
Client	: AECOM Canada Ltd.	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 1000 - 2025 Willingdon Avenue Burnaby BC Canada V5C 0J3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 08-Dec-2020 23:05
PO	: 4222178	Date Analysis Commenced	: 09-Dec-2020
C-O-C number	: 17-864639	Issue Date	: 17-Dec-2020 17:33
Sampler	: CXW + ARR		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits
- Reference Material (RM) Report; Recovery and Acceptance Limits
- Method Blank (MB) Report; Recovery and Acceptance Limits
- Laboratory Control Sample (LCS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Harsha Attanayake	Laboratory Analyst	Organics, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percentage Difference
# = Indicates a QC result that did not meet the ALS DQO.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 128228)											
VA20C2807-001	Anonymous	copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00245	0.00258	5.24%	20%	----
		zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0187	0.0182	3.02%	20%	----
Dissolved Metals (QC Lot: 128386)											
VA20C2904-001	Anonymous	copper, dissolved	7440-50-8	E421	0.200	mg/L	0.49 µg/L	0.00052	0.00003	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	1.00	mg/L	6.7 µg/L	0.0066	0.00002	Diff <2x LOR	----
Dissolved Metals (QC Lot: 130628)											
VA20C2950-002	Anonymous	copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00024	0.00022	0.00003	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 129848)											
VA20C2830-003	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 129849)											
VA20C2830-003	Anonymous	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 128228)						
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 128386)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 130628)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 129848)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	<0.50	----
xylene, o-	95-47-6	E611A	0.5	µg/L	<0.50	----
Hydrocarbons (QCLot: 129849)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129658)						
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129928)						
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 128228)									
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	0.25 mg/L	100	80.0	120	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	0.5 mg/L	100	80.0	120	----
Dissolved Metals (QCLot: 128386)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	104	80.0	120	----
Dissolved Metals (QCLot: 130628)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	105	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	104	80.0	120	----
Volatile Organic Compounds (QCLot: 129848)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	94.9	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	101	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	99.6	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	84.6	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	200 µg/L	106	70.0	130	----
xylene, o-	95-47-6	E611A	0.5	µg/L	100 µg/L	103	70.0	130	----
Hydrocarbons (QCLot: 129849)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	83.2	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129658)									
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	97.3	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	110	50.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129928)									
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.63254 µg/L	98.3	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.58268 µg/L	109	50.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 128228)										
VA20C2850-001	PW17-1_20201208|REG|GW Brackish Water	copper, dissolved	7440-50-8	E469S	0.0382 mg/L	0.04 mg/L	95.5	70.0	130	----
		zinc, dissolved	7440-66-6	E469S	0.779 mg/L	0.8 mg/L	97.3	70.0	130	----
Dissolved Metals (QCLot: 128386)										
VA20C2912-001	Anonymous	copper, dissolved	7440-50-8	E421	0.0206 mg/L	0.02 mg/L	103	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.418 mg/L	0.4 mg/L	104	70.0	130	----
Dissolved Metals (QCLot: 130628)										
VA20C2950-003	Anonymous	copper, dissolved	7440-50-8	E421	0.0199 mg/L	0.02 mg/L	99.4	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.415 mg/L	0.4 mg/L	104	70.0	130	----
Volatile Organic Compounds (QCLot: 129848)										
VA20C2830-004	Anonymous	benzene	71-43-2	E611A	110 µg/L	100 µg/L	110	60.0	140	----
		ethylbenzene	100-41-4	E611A	117 µg/L	100 µg/L	117	60.0	140	----
		styrene	100-42-5	E611A	114 µg/L	100 µg/L	114	60.0	140	----
		toluene	108-88-3	E611A	95.6 µg/L	100 µg/L	95.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	247 µg/L	200 µg/L	124	60.0	140	----
		xylene, o-	95-47-6	E611A	119 µg/L	100 µg/L	119	60.0	140	----
Hydrocarbons (QCLot: 129849)										
VA20C2830-003	Anonymous	VHw (C6-C10)	----	E581.VH+F1	3980 µg/L	6310 µg/L	63.1	60.0	140	----

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 864639

Page 1

Environmental Division Vancouver

Work Order Reference VA20C2850

Telephone : +1 604 253 4188

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☒ NO
	Copy of Invoice with Report ☐ YES ☒ NO
Company:	Parkland Refining (B.C.)
Contact:	Christopher Boys

Report Format / Distribution

Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL)

Quality Control (QC) Report with Report ☒ YES ☐ NO

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Leslie.Southern@aecom.com

Email 2 Justin.Becker@aecom.com

Email 3

Invoice Distribution

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Leslie.Southern@aecom.com

Email 2

Select Service Level Below - Contact your AM to confir

Regular [R] ☒ Standard TAT if received by 3 pm - busin

PRIORITY (Business Days): 4 day [P4-20%] ☐ 3 day [P3-25%] ☐ 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E ; Same Day, Weeke (Laboratory openi

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level selected, you wil

Analysis Requ

Project Information	
ALS Account # / Quote #:	
Job #:	60628556 / 15405
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only): 2850

ALS Contact: Dean Watt

Sampler: CXW+AKR

Indicate Filtered (F), Preserved (P) or Filtered and P

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/VPH+Styrene (P)	LEPH (P)	Benzo(a)pyrene (P)	Naphthalene (P)	Dissolved Copper (HRMS) (F/P)	Dissolved Zinc (HRMS) (F/P)								Brackish Water (>40000 µS/cm)	SAMPLES ON HO	SUSPECTED HAZARD (see Special Instru
1	PW17-1_20201208	08-Dec-20	18:30	Porewater	5	X	X	X	X	X	X								X		
2	PW17-2_20201208		18:30																X		
3	PW17-13_20201208		19:23																X		
4	PW17-14_20201208		19:42																X		
5	PW17-19_20201208		19:19																X		
6	PW17-24_20201208		19:07																X		
7	PW17-29_20201208		20:13																X		
8	PW17-31_20201208		20:36																		
9	PW17-32_20201208		20:31																X		
10	R-Blank-1_20201208		21:58		5																
11	T-Blank-1	08-Dec-20	PM	Other	1	X															

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

BC CSR - Include Hardness with Diss Metals

Only analyze for dissolved copper/zinc for metals

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☑ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				9			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Justin Becker	Date: Dec. 8, 2020	Time: 23:30	Received by:	Date:	Time:	Received by: TC	Date: Dec 8	Time: 11:05

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2015 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA20C3039**	Page	: 1 of 13
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: (604) 444-6400	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 09-Dec-2020 23:35
PO	: 4222178	Date Analysis Commenced	: 11-Dec-2020
C-O-C number	: 17-864639 (times 2)	Issue Date	: 17-Dec-2020 17:36
Sampler	: RMC + CXW		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Omar Beydoun	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in reports identified as "Preliminary Report" are considered authorized for use.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*
DLCI	*Detection Limit Raised: Chromatographic interference due to co-elution.*
DLQ	*Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.*

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	PW17-16-2020 1209|REG|GW	PW17-17-2020 1209|REG|GW	PW17-18-2020 1209|REG|GW Brackish Water	PW17-20-2020 1209|REG|GW Brackish Water	PW17-22-2020 1209|REG|GW Brackish Water
Client sampling date / time					09-Dec-2020 20:14	09-Dec-2020 20:21	09-Dec-2020 20:40	09-Dec-2020 21:35	09-Dec-2020 19:31
					VA20C3039-001	VA20C3039-002	VA20C3039-003	VA20C3039-004	VA20C3039-005
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	228	240	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	----	----	<0.00020	0.00046	0.00153
copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00040 DLA	<0.00020	----	----	----
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	----	----	0.0066	0.0071	0.0036
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0020 DLA	0.0013	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	1.54	2.71	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	2.80	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	106	106	107	106	95.9
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	104	104	108	104	103
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	290	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	280	<100	<100	<100	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	93.9	86.5	91.6	98.7	85.1
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	91.7	103	91.0	94.2	96.1
Polycyclic Aromatic Hydrocarbons									

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-16-2020 1209|REG|GW	PW17-17-2020 1209|REG|GW	PW17-18-2020 1209|REG|GW Brackish Water	PW17-20-2020 1209|REG|GW Brackish Water	PW17-22-2020 1209|REG|GW Brackish Water
				Client sampling date / time	09-Dec-2020 20:14	09-Dec-2020 20:21	09-Dec-2020 20:40	09-Dec-2020 21:35	09-Dec-2020 19:31
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-001	VA20C3039-002	VA20C3039-003	VA20C3039-004	VA20C3039-005
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	0.131	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.020 DLCI	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	0.140	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	0.399	0.024	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	<0.030 DLCI	0.019	<0.010	0.010	0.012
naphthalene	91-20-3	E641A	0.050	µg/L	<0.400 DLQ	<0.200 DLQ	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.600 DLCI	<0.150 DLCI	<0.050	<0.050	<0.050
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	<0.030	<0.030	<0.030
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.401	<0.202	<0.060	<0.060	<0.060
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.402	<0.204	<0.065	<0.065	<0.065
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	102	108	107	113	113
chrysene-d12	1719-03-5	E641A	0.010	%	126	129	126	130	126
naphthalene-d8	1146-65-2	E641A	0.010	%	92.3	96.0	92.5	99.9	98.5
phenanthrene-d10	1517-22-2	E641A	0.010	%	97.4	105	105	110	109

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-21-2020 1209|REG|GW	PW17-23-2020 1209|REG|GW Brackish Water	PW17-25-2020 1209|REG|GW Brackish Water	PW17-26-2020 1209|REG|GW	PW17-27-2020 1209|REG|GW
				Client sampling date / time	09-Dec-2020 19:10	09-Dec-2020 20:06	09-Dec-2020 21:18	09-Dec-2020 18:50	09-Dec-2020 19:25
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-006	VA20C3039-007	VA20C3039-008	VA20C3039-009	VA20C3039-010
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	346	----	----	170	230
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	----	0.00034	0.00070	----	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00052	----	----	<0.00020	0.00058
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	----	0.0119	0.0015	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0020 DLA	----	----	0.0023	0.0034
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	1.41	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	105	102	103	102	102
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	105	108	108	106	104
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	90.1	91.1	85.6	93.5	87.4
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	106	96.9	106	89.1	108
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-21-2020 1209|REG|GW	PW17-23-2020 1209|REG|GW Brackish Water	PW17-25-2020 1209|REG|GW Brackish Water	PW17-26-2020 1209|REG|GW	PW17-27-2020 1209|REG|GW
				Client sampling date / time	09-Dec-2020 19:10	09-Dec-2020 20:06	09-Dec-2020 21:18	09-Dec-2020 18:50	09-Dec-2020 19:25
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-006	VA20C3039-007	VA20C3039-008	VA20C3039-009	VA20C3039-010
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	0.032	<0.010	<0.010	0.024	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.012	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.016	0.016
naphthalene	91-20-3	E641A	0.050	µg/L	<0.100 DLQ	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.055 DLCI	<0.050	<0.050	<0.075 DLQ	<0.050
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	<0.030	<0.030	<0.030
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.104	<0.060	<0.060	<0.060	<0.060
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.108	<0.065	<0.065	<0.065	<0.065
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	115	96.4	109	115	113
chrysene-d12	1719-03-5	E641A	0.010	%	125	125	119	126	124
naphthalene-d8	1146-65-2	E641A	0.010	%	95.2	94.6	94.2	101	98.9
phenanthrene-d10	1517-22-2	E641A	0.010	%	108	107	105	112	109

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

Client sample ID					PW17-28-2020 1209|REG|GW Brackish Water	PW17-30-2020 1209|REG|GW Brackish Water	PW17-33-2020 1209|REG|GW Brackish Water	DUP-1_202012 09|FD|GW	DUP-2_202012 09|FD|GW
Client sampling date / time					09-Dec-2020 19:47	09-Dec-2020 19:10	09-Dec-2020 21:02	09-Dec-2020	09-Dec-2020
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-011	VA20C3039-012	VA20C3039-013	VA20C3039-014	VA20C3039-015
					Result	Result	Result	Result	Result
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	----	----	----	227	170
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00022	0.00078	0.00022	----	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	----	----	----	0.00052	<0.00020
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0013	0.0019	0.0021	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	----	----	----	<0.0020 DLA	0.0026
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	1.69	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	4.28	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	103	106	104	105	104
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	107	108	103	81.6	106
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	340	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	330	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	94.4	83.2	97.1	87.6	96.2
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	95.5	107	98.3	110	99.9
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.134	<0.010

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-28-2020 1209|REG|GW Brackish Water	PW17-30-2020 1209|REG|GW Brackish Water	PW17-33-2020 1209|REG|GW Brackish Water	DUP-1_202012 09|FD|GW	DUP-2_202012 09|FD|GW
				Client sampling date / time	09-Dec-2020 19:47	09-Dec-2020 19:10	09-Dec-2020 21:02	09-Dec-2020	09-Dec-2020
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-011	VA20C3039-012	VA20C3039-013	VA20C3039-014	VA20C3039-015
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.020 DLCI	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	0.022
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.146	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.385	0.012
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.013	<0.010	0.013	<0.021 DLCI	0.017
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.450 DLQ	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.600 DLCI	<0.075 DLQ
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	<0.030	<0.030	<0.030
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.060	<0.060	<0.060	<0.451	<0.060
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.065	<0.065	<0.065	<0.452	<0.065
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	113	111	108	110	113
chrysene-d12	1719-03-5	E641A	0.010	%	125	129	121	126	124
naphthalene-d8	1146-65-2	E641A	0.010	%	101	98.2	96.6	98.3	99.7
phenanthrene-d10	1517-22-2	E641A	0.010	%	111	110	107	108	108

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	DUP-3_202012 09|FD|GW Brackish Water	TRAVEL BLANK-2	TRAVEL BLANK-3	----	----
				Client sampling date / time	09-Dec-2020	09-Dec-2020	09-Dec-2020	----	----
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-016	VA20C3039-017	VA20C3039-018	--------	--------
					Result	Result	Result	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00150	----	----	----	----
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0034	----	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	----	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	105	103	108	----	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	106	104	107	----	----
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	----	----	----	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----	----	----	----
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	----	----
VPHw	----	EC580A	100	µg/L	<100	<100	<100	----	----
HEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
LEPHw	----	EC600A	250	µg/L	<250	----	----	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	89.2	----	----	----	----
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	107	101	115	----	----
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	----	----	----	----
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	----	----	----	----
acridine	260-94-6	E641A	0.010	µg/L	<0.010	----	----	----	----
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	----	----	----	----
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	----	----	----	----

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	DUP-3_202012 09|FD|GW Brackish Water	TRAVEL BLANK-2	TRAVEL BLANK-3	----	----
				Client sampling date / time	09-Dec-2020	09-Dec-2020	09-Dec-2020	----	----
Analyte	CAS Number	Method	LOR	Unit	VA20C3039-016	VA20C3039-017	VA20C3039-018	--------	--------
					Result	Result	Result	----	----
Polycyclic Aromatic Hydrocarbons									
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----	----	----	----
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	----	----	----	----
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	----	----	----	----
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	----	----	----	----
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	----	----	----	----
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	----	----	----	----
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	----	----	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	----	----	----	----
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.012	----	----	----	----
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	----	----	----	----
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	----	----	----	----
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	----	----	----	----
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	----	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	----	----	----	----
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	----	----	----	----
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.060	----	----	----	----
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.065	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	118	----	----	----	----
chrysene-d12	1719-03-5	E641A	0.010	%	118	----	----	----	----
naphthalene-d8	1146-65-2	E641A	0.010	%	91.8	----	----	----	----
phenanthrene-d10	1517-22-2	E641A	0.010	%	111	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA20C3039**	Page	: 1 of 15
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 09-Dec-2020 23:35
PO	: 4222178	Issue Date	: 17-Dec-2020 17:36
C-O-C number	: 17-864639 (times 2)		
Sampler	: RMC + CXW		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 15:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 15:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) DUP-3_20201209|FD|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-18-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-20-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-22-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-23-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-25-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-28-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid)										
PW17-30-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid)										
PW17-33-20201209|REG|GW - Brackish Water	E469S	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	15-Dec-2020	178 days	3 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
DUP-1_20201209|FD|GW	E421	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	11-Dec-2020	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
DUP-2_20201209|FD|GW	E421	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	11-Dec-2020	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-16-20201209|REG|GW	E421	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	11-Dec-2020	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-17-20201209|REG|GW	E421	09-Dec-2020	11-Dec-2020	180 days	1 days	✓	11-Dec-2020	178 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-21-20201209|REG|GW	E421	09-Dec-2020	11-Dec-2020	180 days	2 days	✓	11-Dec-2020	177 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-26-20201209|REG|GW	E421	09-Dec-2020	11-Dec-2020	180 days	2 days	✓	11-Dec-2020	177 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
PW17-27-20201209|REG|GW	E421	09-Dec-2020	11-Dec-2020	180 days	2 days	✓	11-Dec-2020	177 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP-1_20201209|FD|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP-2_20201209|FD|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-16-20201209|REG|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-17-20201209|REG|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-18-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-20-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-21-20201209|REG|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-22-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-23-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times: Rec	Holding Times: Actual	Eval	Analysis: Analysis Date	Holding Times: Rec	Holding Times: Actual	Eval
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-25-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-26-20201209|REG|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-27-20201209|REG|GW	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-28-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-30-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-33-20201209|REG|GW - Brackish Water	E601A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	14-Dec-2020	40 days	2 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP-3_20201209|FD|GW - Brackish Water	E601A	09-Dec-2020	16-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	1 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
DUP-1_20201209|FD|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
DUP-2_20201209|FD|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
DUP-3_20201209|FD|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-16-20201209|REG|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-17-20201209|REG|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-18-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-20-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-21-20201209|REG|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-22-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-23-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-25-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-26-20201209|REG|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-27-20201209|REG|GW	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-28-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-30-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-33-20201209|REG|GW - Brackish Water	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) TRAVEL BLANK-2	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) TRAVEL BLANK-3	E581.VH+F1	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) DUP-1_20201209|FD|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) DUP-2_20201209|FD|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-16-20201209|REG|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-17-20201209|REG|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-18-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-20-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-21-20201209|REG|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-22-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-23-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-25-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-26-20201209|REG|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-27-20201209|REG|GW	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-28-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-30-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-33-20201209|REG|GW - Brackish Water	E641A	09-Dec-2020	12-Dec-2020	14 days	2 days	✓	13-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP-3_20201209|FD|GW - Brackish Water	E641A	09-Dec-2020	16-Dec-2020	14 days	6 days	✓	16-Dec-2020	40 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
DUP-1_20201209|FD|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
DUP-2_20201209|FD|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
DUP-3_20201209|FD|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
PW17-16-20201209|REG|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-17-20201209|REG|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-18-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-20-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-21-20201209|REG|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-22-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-23-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-25-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-26-20201209|REG|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-27-20201209|REG|GW	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-28-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-30-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-33-20201209|REG|GW - Brackish Water	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) TRAVEL BLANK-2	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) TRAVEL BLANK-3	E611A	09-Dec-2020	14-Dec-2020	14 days	4 days	✓	15-Dec-2020	9 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
BTEX by Headspace GC-MS	E611A	130428	2	38	5.2	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	129372	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	129639	1	14	7.1	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	130429	2	33	6.0	5.0	✓
Laboratory Control Samples (LCS)							
BC PHC - EPH by GC-FID	E601A	131605	2	32	6.2	5.0	✓
BTEX by Headspace GC-MS	E611A	130428	2	38	5.2	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	129372	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	129639	1	14	7.1	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	131606	2	30	6.6	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	130429	2	33	6.0	5.0	✓
Method Blanks (MB)							
BC PHC - EPH by GC-FID	E601A	131605	2	32	6.2	5.0	✓
BTEX by Headspace GC-MS	E611A	130428	2	38	5.2	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	129372	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	129639	1	14	7.1	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	131606	2	30	6.6	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	130429	2	33	6.0	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	130428	2	38	5.2	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	129372	1	9	11.1	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	129639	1	14	7.1	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	130429	2	33	6.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Seawater samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS (HMI Mode).
VH and F1 by Headspace GC-FID	E581.VH+F1 Vancouver - Environmental	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
BC PHC - EPH by GC-FID	E601A Vancouver - Environmental	Water	BC MOE Lab Manual	Extractable Petroleum Hydrocarbons (EPH) are analyzed by GC-FID.
BTEX by Headspace GC-MS	E611A Vancouver - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Vancouver - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Dissolved Hardness (Calculated)	EC100 Vancouver - Environmental	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
VPH: VH-BTEX-Styrene	EC580A Vancouver - Environmental	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH6-10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A Vancouver - Environmental	Water	BC MOE Lab Manual (LEPH and HEPH) (mod)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Vancouver - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
VOCs Preparation for Headspace Analysis	EP581 Vancouver - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Vancouver - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **VA20C3039**	Page	: 1 of 10
Client	: AECOM Canada Ltd.	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 1000 - 2025 Willingdon Avenue Burnaby BC Canada V5C 0J3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 09-Dec-2020 23:35
PO	: 4222178	Date Analysis Commenced	: 11-Dec-2020
C-O-C number	: 17-864639 (times 2)	Issue Date	: 17-Dec-2020 17:36
Sampler	: RMC + CXW		
Site	: ----		
Quote number	: AECOM		
No. of samples received	: 18		
No. of samples analysed	: 18		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits
- Reference Material (RM) Report; Recovery and Acceptance Limits
- Method Blank (MB) Report; Recovery and Acceptance Limits
- Laboratory Control Sample (LCS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Omar Beydoun	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percentage Difference
# = Indicates a QC result that did not meet the ALS DQO.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 129372)											
VA20C3039-003	PW17-18-20201209|REG| GW Brackish Water	copper, dissolved	7440-50-8	E469S	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0066	0.0065	0.00008	Diff <2x LOR	----
Dissolved Metals (QC Lot: 129639)											
FJ2000114-001	Anonymous	copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00048	0.00039	0.00009	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0018	<0.0010	0.0008	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 130317)											
VA20C2903-002	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 130428)											
VA20C2975-004	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	0.79	0.70	0.09	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	1.82	1.64	0.18	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	2.28	2.12	0.15	Diff <2x LOR	----
Hydrocarbons (QC Lot: 130316)											
VA20C2903-002	Anonymous	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----
Hydrocarbons (QC Lot: 130429)											
VA20C3039-006	PW17-21-20201209|REG| GW	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 129372)						
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 129639)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 130317)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	<0.50	----
xylene, o-	95-47-6	E611A	0.5	µg/L	<0.50	----
Volatile Organic Compounds (QCLot: 130428)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	<0.50	----
xylene, o-	95-47-6	E611A	0.5	µg/L	<0.50	----
Hydrocarbons (QCLot: 129964)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Hydrocarbons (QCLot: 130316)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 130429)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 131605)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129965)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 129965) - continued						
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----
Polycyclic Aromatic Hydrocarbons (QCLot: 131606)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 131606) - continued						
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 129372)									
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	0.25 mg/L	100.0	80.0	120	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	0.5 mg/L	101	80.0	120	----
Dissolved Metals (QCLot: 129639)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	107	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	112	80.0	120	----
Volatile Organic Compounds (QCLot: 130317)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	97.5	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	93.0	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	98.2	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	104	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	200 µg/L	97.7	70.0	130	----
xylene, o-	95-47-6	E611A	0.5	µg/L	100 µg/L	96.4	70.0	130	----
Volatile Organic Compounds (QCLot: 130428)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	94.8	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	92.5	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	100	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	103	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	200 µg/L	97.4	70.0	130	----
xylene, o-	95-47-6	E611A	0.5	µg/L	100 µg/L	96.0	70.0	130	----
Hydrocarbons (QCLot: 129964)									
EPH (C10-C19)	----	E601A	250	µg/L	6491 µg/L	130	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3363 µg/L	124	70.0	130	----
Hydrocarbons (QCLot: 130316)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	87.1	70.0	130	----
Hydrocarbons (QCLot: 130429)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	94.3	70.0	130	----
Hydrocarbons (QCLot: 131605)									
EPH (C10-C19)	----	E601A	250	µg/L	6491 µg/L	127	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3363 µg/L	130	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 129965)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.60161 µg/L	104	60.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 129965) - continued									
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.62327 µg/L	103	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.69259 µg/L	99.2	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.70831 µg/L	99.6	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.76929 µg/L	97.0	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.63254 µg/L	103	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.50096 µg/L	119	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	120	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.62677 µg/L	101	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.47367 µg/L	127	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.71804 µg/L	103	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.6751 µg/L	99.0	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.60462 µg/L	111	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.56923 µg/L	116	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.80464 µg/L	86.1	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.56455 µg/L	105	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.57911 µg/L	103	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.58268 µg/L	104	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.61578 µg/L	110	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.63777 µg/L	109	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.46775 µg/L	130	60.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 131606)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	125	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	130	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	126	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	118	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	108	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	112	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	117	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	124	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	121	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	126	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 131606) - continued									
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	109	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	124	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	126	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	116	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 129372)										
VA20C3039-004	PW17-20-20201209|REG|GW Brackish Water	copper, dissolved	7440-50-8	E469S	0.0362 mg/L	0.04 mg/L	90.4	70.0	130	----
		zinc, dissolved	7440-66-6	E469S	0.703 mg/L	0.8 mg/L	87.9	70.0	130	----
Dissolved Metals (QCLot: 129639)										
FJ2000114-002	Anonymous	copper, dissolved	7440-50-8	E421	0.0201 mg/L	0.02 mg/L	101	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.433 mg/L	0.4 mg/L	108	70.0	130	----
Volatile Organic Compounds (QCLot: 130317)										
VA20C2903-005	Anonymous	benzene	71-43-2	E611A	97.5 µg/L	100 µg/L	97.5	60.0	140	----
		ethylbenzene	100-41-4	E611A	92.0 µg/L	100 µg/L	92.0	60.0	140	----
		styrene	100-42-5	E611A	102 µg/L	100 µg/L	102	60.0	140	----
		toluene	108-88-3	E611A	90.8 µg/L	100 µg/L	90.8	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	193 µg/L	200 µg/L	96.4	60.0	140	----
		xylene, o-	95-47-6	E611A	98.0 µg/L	100 µg/L	98.0	60.0	140	----
Volatile Organic Compounds (QCLot: 130428)										
VA20C2977-001	Anonymous	benzene	71-43-2	E611A	82.9 µg/L	100 µg/L	82.9	60.0	140	----
		ethylbenzene	100-41-4	E611A	94.5 µg/L	100 µg/L	94.5	60.0	140	----
		styrene	100-42-5	E611A	89.3 µg/L	100 µg/L	89.3	60.0	140	----
		toluene	108-88-3	E611A	ND µg/L	100 µg/L	ND	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	ND µg/L	200 µg/L	ND	60.0	140	----
		xylene, o-	95-47-6	E611A	ND µg/L	100 µg/L	ND	60.0	140	----
Hydrocarbons (QCLot: 130316)										
VA20C2903-004	Anonymous	VHw (C6-C10)	----	E581.VH+F1	5620 µg/L	6310 µg/L	89.1	60.0	140	----
Hydrocarbons (QCLot: 130429)										
VA20C3039-007	PW17-23-20201209|REG|GW Brackish Water	VHw (C6-C10)	----	E581.VH+F1	5270 µg/L	6310 µg/L	83.5	60.0	140	----

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 864639

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby, BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☒ NO
	Copy of Invoice with Report ☐ YES ☒ NO
Company:	Parkland Refining (B.C.)
Contact:	Christopher Boys

Report Format / Distribution

Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL)

Quality Control (QC) Report with Report ☒ YES ☐ NO

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: Leslie.Southern@aecom.com

Email 2: Justin.Becker@aecom.com

Email 3:

Invoice Distribution

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: Leslie.Southern@aecom.com

Email 2:

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☒ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐; 3 day [P3-25%] ☐; 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐; Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: _____ dd-mmm-yy-hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Project Information

ALS Account # / Quote #:

Job #: 60628556 / 15405

PO / AFE:

LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#:

Major/Minor Code: Routing Code:

Requisitioner:

Location:

ALS Lab Work Order # (lab use only): 3039

ALS Contact: Dean Watt

Sampler: RMC + CXW

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/VPH + Styrene (P)	LEPH (P)	Benzo(a)Pyrene (P)	Naphthalene (P)	Dissolved Copper (HRMS) (F/P)	Dissolved Zinc (HRMS) (F/P)	Brackish Water (>24000 µS/cm)	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
1	PW17-16_20201209	09-Dec-20	20:14	Porewater	5	X	X	X	X	X	X			
2	PW17-17_20201209		20:21											
3	PW17-18_20201209		20:40									X		
4	PW17-20_20201209		21:35									X		
5	PW17-22_20201209		19:31									X		
6	PW17-21_20201209		19:10											
7	PW17-23_20201209		20:06									X		
8	PW17-25_20201209		21:18									X		
9	PW17-26_20201209		18:50											
10	PW17-27_20201209		19:25											
11	PW17-28_20201209		19:47									X		
12	PW17-30_20201209		19:10									X		

Environmental Division Vancouver
Work Order Reference
VA20C3039

Telephone: +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

BC CSR - Please analyse for hardness

T-Blank-2: 33, 25, 20, 21, 23, Dup-3, 22, Dup-2, Dup-1

Only analyze for dissolved copper/zinc for metals

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☒ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				6			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Justin Becker	Date: Dec. 9, 2020	Time: 23:45	Received by:	Date:	Time:	Received by:	Date: Dec 9	Time: 11:35

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 864639

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby BC
Postal Code:	V5A 4R4

Report Format / Distribution	
Select Report Format:	[X] PDF [X] EXCEL [X] EDD (DIGITAL)
Quality Control (QC) Report with Report	[X] YES [ ] NO
[X] Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	Leslie.Southern@aecom.com
Email 2	Justin.Becker@aecom.com
Email 3	

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days)		EMERGENCY	
4 day [P4-20%]	[ ]	1 Business day [E - 100%]	[ ]
3 day [P3-25%]	[ ]	Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)]	[ ]
2 day [P2-50%]	[ ]		

Date and Time Required for all E&P TATs: ____ dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Invoice To	Same as Report To	[ ] YES [X] NO
	Copy of Invoice with Report	[ ] YES [X] NO
Company:	Parkland Refining (B.C.)	
Contact:	Christopher Boys	

Invoice Distribution	
Select Invoice Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	Leslie.Southern@aecom.com
Email 2	

Project Information	
ALS Account # / Quote #:	
Job #:	60628556 / 15405
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only):

ALS Contact: Dean Watt

Sampler: RMG + CXW

Analysis Request — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/VPH+Styrene (P)	LEPH (P)	Benzo(a)Pyrene (P)	Naphthalene (P)	Dissolved Copper (HRMS) (F/P)	Dissolved Zinc (HRMS) (F/P)	Brackish Water (24000 µS/cm)	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
13	PW7-33_20201209	09-Dec-20	21:02	Porewater	5	X	X	X	X	X	X	X		
14	DUP-1_20201209	↓	PM	↓	↓	↓	↓	↓	↓	↓	↓			
15	DUP-2_20201209	↓	PM	↓	↓	↓	↓	↓	↓	↓	↓			
16	DUP-3_20201209	↓	PM	↓	↓	↓	↓	↓	↓	↓	↓	X		
17	T-Blank-2	09-Dec-20	N/A	other	1	X								
18	T-Blank-3	↓	N/A	↓	1	X								

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? [ ] YES [X] NO

Are samples for human consumption/ use? [ ] YES [X] NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

BC CSR • Please analyse for hardness

Only analyze for dissolved copper/zinc for metals

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] SIF Observations Yes [ ] No [ ]

Ice Packs [X] Ice Cubes [ ] Custody seal intact Yes [ ] No [ ]

Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				6			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Justin Becker	Date: Dec. 9, 2020	Time: 23:45	Received by:	Date:	Time:	Received by: TC	Date: Dec 9	Time: 11:32

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2019 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA20C3128**	Page	: 1 of 9
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: (604) 444-6400	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 10-Dec-2020 23:42
PO	: 4222178	Date Analysis Commenced	: 14-Dec-2020
C-O-C number	: 17-864639	Issue Date	: 18-Dec-2020 16:48
Sampler	: ARR + CXW		
Site	:		
Quote number	: AECOM		
No. of samples received	: 13		
No. of samples analysed	: 13		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Brieanna Allen	Department Manager - Organics	Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in reports identified as "Preliminary Report" are considered authorized for use.

Qualifiers

Qualifier	*Description*
RRV	*Reported result verified by repeat analysis.*
SUR-ND	*Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.*

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-4_20201210|REG|GW Brackish Water	PW17-5_20201210|REG|GW Brackish Water	PW17-6_20201210|REG|GW Brackish Water	PW17-3_20201210|REG|GW Brackish Water	PW17-7_20201210|REG|GW Brackish Water
				Client sampling date / time	10-Dec-2020 18:52	10-Dec-2020 17:30	10-Dec-2020 19:12	10-Dec-2020 20:33	10-Dec-2020 20:12
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-001	VA20C3128-002	VA20C3128-003	VA20C3128-004	VA20C3128-005
					Result	Result	Result	Result	Result
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00020	0.00108	<0.00020	0.00046	0.00031
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0012	0.0010	<0.0010	0.0031	0.0018
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	106	97.6	97.8	102	98.5
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	104	100.0	95.8	105	99.2
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	90.9	82.2	94.5	83.5	88.1
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	112	108	105	93.7	108
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-4_20201210|REG|GW Brackish Water	PW17-5_20201210|REG|GW Brackish Water	PW17-6_20201210|REG|GW Brackish Water	PW17-3_20201210|REG|GW Brackish Water	PW17-7_20201210|REG|GW Brackish Water
				Client sampling date / time	10-Dec-2020 18:52	10-Dec-2020 17:30	10-Dec-2020 19:12	10-Dec-2020 20:33	10-Dec-2020 20:12
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-001	VA20C3128-002	VA20C3128-003	VA20C3128-004	VA20C3128-005
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	0.011	0.013	0.015	<0.010	<0.010
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	<0.030	<0.030	<0.030
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.060	<0.060	<0.060	<0.060	<0.060
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.065	<0.065	<0.065	<0.065	<0.065
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	104	101	110	101	113
chrysene-d12	1719-03-5	E641A	0.010	%	101	98.3	110	102	110
naphthalene-d8	1146-65-2	E641A	0.010	%	85.0	86.6	96.9	90.6	96.0
phenanthrene-d10	1517-22-2	E641A	0.010	%	104	104	115	104	114

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-8_20201210|REG|GW Brackish Water	PW17-9_20201210|REG|GW Brackish Water	PW17-10_20201210|REG|GW Brackish Water	PW17-11_20201210|REG|GW Brackish Water	PW17-12_20201210|REG|GW Brackish Water
				Client sampling date / time	10-Dec-2020 20:43	10-Dec-2020 18:28	10-Dec-2020 19:45	10-Dec-2020 20:28	10-Dec-2020 19:53
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-006	VA20C3128-007	VA20C3128-008	VA20C3128-009	VA20C3128-010
					Result	Result	Result	Result	Result
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00040	0.00618	0.00061	<0.00020	0.00037
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	<0.0010	0.0039	0.0023	<0.0010	0.0014
dissolved metals filtration location	----	EP421	-	-	Field	Field	Field	Field	Field
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	96.2	102	97.2	95.7	98.7
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	96.9	99.3	102	103	106
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	<250	<250	<250
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	<100	<100
VPHw	----	EC580A	100	µg/L	<100	<100	<100	<100	<100
HEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
LEPHw	----	EC600A	250	µg/L	<250	<250	<250	<250	<250
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	89.2	85.0	95.2	83.8	91.2
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	93.5	65.0 SUR-ND	93.8	93.0	108
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	0.013	<0.010	<0.010	<0.010
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-8_20201210|REG|GW Brackish Water	PW17-9_20201210|REG|GW Brackish Water	PW17-10_20201210|REG|GW Brackish Water	PW17-11_20201210|REG|GW Brackish Water	PW17-12_20201210|REG|GW Brackish Water
				Client sampling date / time	10-Dec-2020 20:43	10-Dec-2020 18:28	10-Dec-2020 19:45	10-Dec-2020 20:28	10-Dec-2020 19:53
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-006	VA20C3128-007	VA20C3128-008	VA20C3128-009	VA20C3128-010
					Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons									
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	<0.010	<0.010	<0.010	0.010	<0.010
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	<0.030	<0.030	<0.030
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.060	<0.060	<0.060	<0.060	<0.060
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.065	<0.065	<0.065	<0.065	<0.065
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	109	95.7	102	99.7	77.6
chrysene-d12	1719-03-5	E641A	0.010	%	108	93.1	98.6	97.3	99.1
naphthalene-d8	1146-65-2	E641A	0.010	%	94.1	83.1	91.7	90.7	89.2
phenanthrene-d10	1517-22-2	E641A	0.010	%	114	98.1	106	106	107

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-15_2020 1210|REG|GW Brackish Water	R-Blank-2_2020 1210|FB|GW	TRAVEL BLANK-5	----	----
				Client sampling date / time	10-Dec-2020 20:11	10-Dec-2020 22:20	10-Dec-2020	----	----
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-011	VA20C3128-012	VA20C3128-014	--------	--------
					Result	Result	Result	----	----
Physical Tests									
hardness (as CaCO3), dissolved	----	EC100	0.60	mg/L	----	<0.60	----	----	----
Dissolved Metals									
copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00027	----	----	----	----
copper, dissolved	7440-50-8	E421	0.00020	mg/L	----	<0.00020	----	----	----
zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	0.0014	----	----	----	----
zinc, dissolved	7440-66-6	E421	0.0010	mg/L	----	0.0018 RRV	----	----	----
dissolved metals filtration location	----	EP421	-	-	Field	Field	----	----	----
Volatile Organic Compounds [Fuels]									
benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	<0.50	----	----
xylenes, total	1330-20-7	E611A	0.75	µg/L	<0.75	<0.75	<0.75	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	E611A	0.50	%	96.9	94.9	96.7	----	----
difluorobenzene, 1,4-	540-36-3	E611A	0.50	%	102	104	101	----	----
Hydrocarbons									
EPH (C10-C19)	----	E601A	250	µg/L	<250	<250	----	----	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	<250	----	----	----
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	<100	----	----
VPHw	----	EC580A	100	µg/L	<100	<100	<100	----	----
HEPHw	----	EC600A	250	µg/L	<250	<250	----	----	----
LEPHw	----	EC600A	250	µg/L	<250	<250	----	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (EPH surr)	392-83-6	E601A	50	%	89.4	88.0	----	----	----
dichlorotoluene, 3,4-	97-75-0	E581.VH+F1	1.0	%	94.4	84.0	107	----	----
Polycyclic Aromatic Hydrocarbons									
acenaphthene	83-32-9	E641A	0.010	µg/L	<0.010	<0.010	----	----	----

Analytical Results

Sub-Matrix: **Pore Water**
(Matrix: **Water**)

				Client sample ID	PW17-15_2020 1210|REG|GW Brackish Water	R-Blank-2_2020 1210|FB|GW	TRAVEL BLANK-5	----	----
				Client sampling date / time	10-Dec-2020 20:11	10-Dec-2020 22:20	10-Dec-2020	----	----
Analyte	CAS Number	Method	LOR	Unit	VA20C3128-011	VA20C3128-012	VA20C3128-014	--------	--------
					Result	Result	Result	----	----
Polycyclic Aromatic Hydrocarbons									
acenaphthylene	208-96-8	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
acridine	260-94-6	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
anthracene	120-12-7	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
benz(a)anthracene	56-55-3	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
benzo(a)pyrene	50-32-8	E641A	0.0050	µg/L	<0.0050	<0.0050	----	----	----
benzo(b+j)fluoranthene	----	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	<0.015	----	----	----
benzo(g,h,i)perylene	191-24-2	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
benzo(k)fluoranthene	207-08-9	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
chrysene	218-01-9	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
dibenz(a,h)anthracene	53-70-3	E641A	0.0050	µg/L	<0.0050	<0.0050	----	----	----
fluoranthene	206-44-0	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
fluorene	86-73-7	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
methylnaphthalene, 1-	90-12-0	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
methylnaphthalene, 2-	91-57-6	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
naphthalene	91-20-3	E641A	0.050	µg/L	<0.050	<0.050	----	----	----
phenanthrene	85-01-8	E641A	0.020	µg/L	<0.020	<0.020	----	----	----
pyrene	129-00-0	E641A	0.010	µg/L	<0.010	<0.010	----	----	----
quinoline	6027-02-7	E641A	0.050	µg/L	<0.050	<0.050	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A	0.0100	µg/L	<0.0100	<0.0100	----	----	----
PAHs, high molecular weight (BC AWQ)	----	E641A	0.030	µg/L	<0.030	<0.030	----	----	----
PAHs, low molecular weight (BC AWQ)	----	E641A	0.060	µg/L	<0.060	<0.060	----	----	----
PAHs, total (EPA 16)	----	E641A	0.065	µg/L	<0.065	<0.065	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates									
acridine-d9	34749-75-2	E641A	0.010	%	106	91.7	----	----	----
chrysene-d12	1719-03-5	E641A	0.010	%	104	93.3	----	----	----
naphthalene-d8	1146-65-2	E641A	0.010	%	95.5	82.9	----	----	----
phenanthrene-d10	1517-22-2	E641A	0.010	%	111	97.3	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA20C3128**	Page	: 1 of 14
Client	: **AECOM Canada Ltd.**	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 3292 Production Way Burnaby BC Canada V5A 4R4	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 10-Dec-2020 23:42
PO	: 4222178	Issue Date	: 18-Dec-2020 16:48
C-O-C number	: 17-864639		
Sampler	: ARR + CXW		
Site	:		
Quote number	: AECOM		
No. of samples received	: 13		
No. of samples analysed	: 13		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Test sample Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Regular Sample Surrogates

Sub-Matrix: **Pore Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Result	Limits	Comment
Samples Submitted							
Hydrocarbons Surrogates	VA20C3128-007	PW17-9_20201210|REG|GW Brackish Water	dichlorotoluene, 3,4-	97-75-0	65.0 %	70.0-130 %	Recovery less than lower data quality objective

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 15:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 15:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-10_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-11_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-12_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-15_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-3_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-4_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-5_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-6_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-7_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-8_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Seawater by CRC ICPMS (HMI)										
HDPE dissolved (nitric acid) PW17-9_20201210|REG|GW - Brackish Water	E469S	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) R-Blank-2_20201210|FB|GW	E421	10-Dec-2020	14-Dec-2020	180 days	3 days	✓	15-Dec-2020	176 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-10_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-11_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	18-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-12_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	18-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-15_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	18-Dec-2020	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-3_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-4_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-5_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-6_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-7_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-8_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-9_20201210|REG|GW - Brackish Water	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Hydrocarbons : BC PHC - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
R-Blank-2_20201210|FB|GW	E601A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	18-Dec-2020	40 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-4_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	14-Dec-2020	14 days	3 days	✓	15-Dec-2020	10 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-10_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-11_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-12_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-15_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-3_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-5_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-6_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-7_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate) PW17-8_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
PW17-9_20201210|REG|GW - Brackish Water	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
R-Blank-2_20201210|FB|GW	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
TRAVEL BLANK-5	E581.VH+F1	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-10_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-11_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-12_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-15_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-3_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
PW17-4_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-5_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-6_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-7_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-8_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) PW17-9_20201210|REG|GW - Brackish Water	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) R-Blank-2_20201210|FB|GW	E641A	10-Dec-2020	17-Dec-2020	14 days	6 days	✓	17-Dec-2020	40 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-4_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	14-Dec-2020	14 days	3 days	✓	15-Dec-2020	10 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-10_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-11_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation: Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis: Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-12_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-15_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-3_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-5_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-6_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-7_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-8_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) PW17-9_20201210|REG|GW - Brackish Water	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate) R-Blank-2_20201210|FB|GW	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds [Fuels] : BTEX by Headspace GC-MS										
Glass vial (sodium bisulfate)										
TRAVEL BLANK-5	E611A	10-Dec-2020	16-Dec-2020	14 days	5 days	✓	16-Dec-2020	8 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
BTEX by Headspace GC-MS	E611A	130428	2	36	5.5	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	130563	1	16	6.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130636	1	14	7.1	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	131518	2	29	6.9	5.0	✓
Laboratory Control Samples (LCS)							
BC PHC - EPH by GC-FID	E601A	132082	2	26	7.6	5.0	✓
BTEX by Headspace GC-MS	E611A	130428	2	36	5.5	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	130563	1	16	6.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130636	1	14	7.1	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	132081	2	35	5.7	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	131518	2	29	6.9	5.0	✓
Method Blanks (MB)							
BC PHC - EPH by GC-FID	E601A	132082	2	26	7.6	5.0	✓
BTEX by Headspace GC-MS	E611A	130428	2	36	5.5	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	130563	1	16	6.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130636	1	14	7.1	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	132081	2	35	5.7	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	131518	2	29	6.9	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	130428	2	36	5.5	5.0	✓
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S	130563	1	16	6.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	130636	1	14	7.1	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	131518	2	29	6.9	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Seawater by CRC ICPMS (HMI)	E469S Vancouver - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Seawater samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS (HMI Mode).
VH and F1 by Headspace GC-FID	E581.VH+F1 Vancouver - Environmental	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
BC PHC - EPH by GC-FID	E601A Vancouver - Environmental	Water	BC MOE Lab Manual	Extractable Petroleum Hydrocarbons (EPH) are analyzed by GC-FID.
BTEX by Headspace GC-MS	E611A Vancouver - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Vancouver - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Dissolved Hardness (Calculated)	EC100 Vancouver - Environmental	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
VPH: VH-BTEX-Styrene	EC580A Vancouver - Environmental	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH6-10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A Vancouver - Environmental	Water	BC MOE Lab Manual (LEPH and HEPH) (mod)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Vancouver - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
VOCs Preparation for Headspace Analysis	EP581 Vancouver - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Vancouver - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **VA20C3128**	Page	: 1 of 10
Client	: AECOM Canada Ltd.	Laboratory	: Vancouver - Environmental
Contact	: Stephen Sumsion	Account Manager	: Dean Watt
Address	: 1000 - 2025 Willingdon Avenue Burnaby BC Canada V5C 0J3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: 60628556/15405	Date Samples Received	: 10-Dec-2020 23:42
PO	: 4222178	Date Analysis Commenced	: 14-Dec-2020
C-O-C number	: 17-864639	Issue Date	: 18-Dec-2020 16:48
Sampler	: ARR + CXW		
Site	:		
Quote number	: AECOM		
No. of samples received	: 13		
No. of samples analysed	: 13		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits
- Reference Material (RM) Report; Recovery and Acceptance Limits
- Method Blank (MB) Report; Recovery and Acceptance Limits
- Laboratory Control Sample (LCS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Annabelle Prasad	Analyst	Metals, Burnaby, British Columbia
Brieanna Allen	Department Manager - Organics	Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Monica Ko	Lab Assistant	Metals, Burnaby, British Columbia
Ophelia Chiu	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percentage Difference
# = Indicates a QC result that did not meet the ALS DQO.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 130563)											
VA20C3269-002	Anonymous	copper, dissolved	7440-50-8	E469S	0.00020	mg/L	0.00022	0.00022	0.000002	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E469S	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 130636)											
VA20C3138-001	Anonymous	copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00024	0.00024	0.000009	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 130428)											
VA20C2975-004	Anonymous	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	0.79	0.70	0.09	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	1.82	1.64	0.18	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	2.28	2.12	0.15	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 131517)											
VA20C3128-002	PW17-5_20201210|REG|GW Brackish Water	benzene	71-43-2	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 130429)											
VA20C3039-006	Anonymous	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----
Hydrocarbons (QC Lot: 131518)											
VA20C3128-002	PW17-5_20201210|REG|GW Brackish Water	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.00%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 130563)						
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 130636)						
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 130428)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	<0.50	----
xylene, o-	95-47-6	E611A	0.5	µg/L	<0.50	----
Volatile Organic Compounds (QCLot: 131517)						
benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
styrene	100-42-5	E611A	0.5	µg/L	<0.50	----
toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	<0.50	----
xylene, o-	95-47-6	E611A	0.5	µg/L	<0.50	----
Hydrocarbons (QCLot: 130429)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 131518)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 132066)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Hydrocarbons (QCLot: 132082)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 132065)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 132065) - continued						
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----
Polycyclic Aromatic Hydrocarbons (QCLot: 132081)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	<0.010	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	<0.015	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 132081) - continued						
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
quinoline	6027-02-7	E641A	0.05	µg/L	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 130563)									
copper, dissolved	7440-50-8	E469S	0.0002	mg/L	0.25 mg/L	100	80.0	120	----
zinc, dissolved	7440-66-6	E469S	0.001	mg/L	0.5 mg/L	104	80.0	120	----
Dissolved Metals (QCLot: 130636)									
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	102	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	102	80.0	120	----
Volatile Organic Compounds (QCLot: 130428)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	94.8	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	92.5	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	100	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	103	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	200 µg/L	97.4	70.0	130	----
xylene, o-	95-47-6	E611A	0.5	µg/L	100 µg/L	96.0	70.0	130	----
Volatile Organic Compounds (QCLot: 131517)									
benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	94.1	70.0	130	----
ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	119	70.0	130	----
styrene	100-42-5	E611A	0.5	µg/L	100 µg/L	96.9	70.0	130	----
toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	90.9	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.5	µg/L	200 µg/L	104	70.0	130	----
xylene, o-	95-47-6	E611A	0.5	µg/L	100 µg/L	95.2	70.0	130	----
Hydrocarbons (QCLot: 130429)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	94.3	70.0	130	----
Hydrocarbons (QCLot: 131518)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	91.9	70.0	130	----
Hydrocarbons (QCLot: 132066)									
EPH (C10-C19)	----	E601A	250	µg/L	6491 µg/L	118	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3363 µg/L	112	70.0	130	----
Hydrocarbons (QCLot: 132082)									
EPH (C10-C19)	----	E601A	250	µg/L	6491 µg/L	103	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3363 µg/L	108	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 132065)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	114	60.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 132065) - continued									
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	117	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	114	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	112	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	107	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	113	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	105	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	108	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	118	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	109	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	108	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	119	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	119	60.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 132081)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	112	60.0	130	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	115	60.0	130	----
acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	114	60.0	130	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	124	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	114	60.0	130	----
benzo(b+j)fluoranthene	----	E641A	0.01	µg/L	0.5 µg/L	106	60.0	130	----
benzo(b+j+k)fluoranthene	----	E641A	0.015	µg/L	1 µg/L	113	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	106	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	123	60.0	130	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	111	60.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 132081) - continued									
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	107	60.0	130	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	106	50.0	130	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	119	60.0	130	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
quinoline	6027-02-7	E641A	0.05	µg/L	0.5 µg/L	110	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 130563)										
VA20C3269-006	Anonymous	copper, dissolved	7440-50-8	E469S	0.0370 mg/L	0.04 mg/L	92.5	70.0	130	----
		zinc, dissolved	7440-66-6	E469S	0.737 mg/L	0.8 mg/L	92.1	70.0	130	----
Dissolved Metals (QCLot: 130636)										
VA20C3138-002	Anonymous	copper, dissolved	7440-50-8	E421	0.0194 mg/L	0.02 mg/L	96.8	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.404 mg/L	0.4 mg/L	101	70.0	130	----
Volatile Organic Compounds (QCLot: 130428)										
VA20C2977-001	Anonymous	benzene	71-43-2	E611A	82.9 µg/L	100 µg/L	82.9	60.0	140	----
		ethylbenzene	100-41-4	E611A	94.5 µg/L	100 µg/L	94.5	60.0	140	----
		styrene	100-42-5	E611A	89.3 µg/L	100 µg/L	89.3	60.0	140	----
		toluene	108-88-3	E611A	ND µg/L	100 µg/L	ND	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	ND µg/L	200 µg/L	ND	60.0	140	----
		xylene, o-	95-47-6	E611A	ND µg/L	100 µg/L	ND	60.0	140	----
Volatile Organic Compounds (QCLot: 131517)										
VA20C3128-003	PW17-6_20201210|REG|GW Brackish Water	benzene	71-43-2	E611A	93.1 µg/L	100 µg/L	93.1	60.0	140	----
		ethylbenzene	100-41-4	E611A	124 µg/L	100 µg/L	124	60.0	140	----
		styrene	100-42-5	E611A	95.8 µg/L	100 µg/L	95.8	60.0	140	----
		toluene	108-88-3	E611A	86.6 µg/L	100 µg/L	86.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	202 µg/L	200 µg/L	101	60.0	140	----
		xylene, o-	95-47-6	E611A	93.7 µg/L	100 µg/L	93.7	60.0	140	----
Hydrocarbons (QCLot: 130429)										
VA20C3039-007	Anonymous	VHw (C6-C10)	----	E581.VH+F1	5270 µg/L	6310 µg/L	83.5	60.0	140	----
Hydrocarbons (QCLot: 131518)										
VA20C3128-004	PW17-3_20201210|REG|GW Brackish Water	VHw (C6-C10)	----	E581.VH+F1	6800 µg/L	6310 µg/L	108	60.0	140	----

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 864639

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
Company address below will appear on the final report	
Street:	3292 Production Way
City/Province:	Burnaby BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☒ NO
	Copy of Invoice with Report ☐ YES ☒ NO
Company:	Parkland Refining (B.C.)
Contact:	Christopher Boys

Report Format / Distribution

Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL)

Quality Control (QC) Report with Report ☒ YES ☐ NO

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Leslie.Southern@aecom.com

Email 2 Justin.Becker@aecom.com

Email 3

Invoice Distribution

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Leslie.Southern@aecom.com

Email 2

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☒ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days)		EMERGENCY	
4 day [P4-20%]	☐	1 Business day [E - 100%]	☐
3 day [P3-25%]	☐	Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)]	☐
2 day [P2-50%]	☐		

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Project Information

ALS Account # / Quote #:

Job #: 60628556 / 15405

PO / AFE:

LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#

Major/Minor Code: Routing Code:

Requisitioner:

Location:

ALS Lab Work Order # (lab use only): 3128

ALS Contact: Dean Watt

Sampler: ARR + CXW

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/VPH+Styrene (P)	LEPH (P)	Benzo(a)Pyrene (P)	Naphthalene (P)	Dissolved Copper (HRMS) (F/P)	Dissolved Zinc (HRMS) (F/P)	Brackish Water (24000 µS/cm)	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
1	PW17-4_20201210	10-Dec-20	18:52	Porewater	5	X	X	X	X	X	X	X		
2	PW17-5_20201210		17:30									X		
3	PW17-6_20201210		19:12									X		
4	PW17-3_20201210		20:33									X		
5	PW17-7_20201210		20:12									X		
6	PW17-8_20201210		20:43									X		
7	PW17-9_20201210		18:28									X		
8	PW17-10_20201210		19:45									X		
9	PW17-11_20201210		20:28									X		
10	PW17-12_20201210		19:53									X		
11	PW17-15_20201210		20:11									X		
12	R-Blank-2_20201210		22:20											

Environmental Division
Vancouver
Work Order Reference
VA20C3128

Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

BC CSR Include hardness in analysis

T4-5,15,11,8,12,Rinse

Only analyze for dissolved copper/zinc for metals

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☒ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
			5		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Justin Becker	Date: Dec 10, 2020	Time: 23:30	Received by:	Date:	Time:	Received by:	Date: 13 2020	Time: 11:42

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 864639

Report To	Contact and company name below will appear on the final report
Company:	AECOM Canada Ltd.
Contact:	Leslie Southern
Phone:	604-444-6608
	Company address below will appear on the final report
Street:	3292 Production Way
City/Province:	Burnaby BC
Postal Code:	V5A 4R4
Invoice To	Same as Report To ☐ YES ☒ NO
	Copy of Invoice with Report ☐ YES ☒ NO
Company:	Parkland Refining (B.C.)
Contact:	Christopher Boys

Report Format / Distribution

Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL)

Quality Control (QC) Report with Report ☒ YES ☐ NO

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: Leslie.Southern@aecom.com

Email 2: Justin.Becker@aecom.com

Email 3:

Invoice Distribution

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: Leslie.Southern@aecom.com

Email 2:

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☒ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐; 3 day [P3-25%] ☐; 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐; Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: _____ dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Project Information

ALS Account # / Quote #:

Job #: 60628556 / 15405

PO / AFE:

LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#:

Major/Minor Code: Routing Code:

Requisitioner:

Location:

ALS Lab Work Order # (lab use only):

ALS Contact: Dean Watt

Sampler: ARR + CXW

Analysis Request — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	BTEX/VPH + Styrene (P)	LEPH (P)	Benzo(a)Pyrene (P)	Naphthalene (P)	Dissolved Copper (HRMS) (F/P)	Dissolved Zinc (HRMS) (F/P)	Brackish Water (24000 µS/cm)	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	~~PW17-4_20201210~~													
	~~PW17-5_20201210~~													
	~~PW17-6_20201210~~													
	~~PW17-7_20201210~~													
	~~PW17-8_20201210~~													
13	T-Blank-4	10-Dec-20	N/A	Porewater	1	X								
14	T-Blank-5	↓	N/A	↓	1	X								

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

BC CSR Include hardness in analysis

Only analyze for dissolved copper/zinc for metals

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice Packs ☒ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
			5		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Justin Becker	Date: Dec 10, 2020	Time: 23:30	Received by:	Date:	Time:	Received by:	Date: DEC 10 2020	Time: 11:42

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2016 FRONT

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

Appendix D

Quality Assurance and Quality Control Protocols

DATA QUALITY ASSURANCE/QUALITY CONTROL

In order to assure the integrity and defensibility of the data collected, rigorous QA/QC protocols were observed. These protocols ensured that all samples were properly collected, identified, stored, shipped, and documented. Standard operating procedures (SOPs) for sample collection and storage, equipment decontamination, and sample chain of custody protocols were followed. Porewater samples were collected using sampling techniques discussed above. The use of these methods ensured the quality, soundness, and defensibility of the data obtained. The laboratory analytical data, once generated, was also proofed for inconsistencies and anomalies. Field duplicates, trip blanks, and rinsate blanks were collected for QA/QC purposes.

Field Duplicate Samples

Field duplicate samples are two identical samples that are submitted to the laboratory with no indication that they are the same. The analysis of field duplicate samples provides an indication of the total precision of the sampling and analysis process. Field duplicate samples were collected and analyzed at a rate of approximately 10% of samples for a given analytical suite.

Trip Blanks

Trip blanks are samples of clean deionized, distilled (Reagent Grade Type II) water that are prepared in the laboratory, taken to the field, retained on site throughout sample collection, returned to the laboratory, and analyzed with the environmental samples. The QA/QC review identifies trip blanks with detections of target analytes and evaluates the effect of the detections on associated sample results for possible cross-contamination during transport. One trip blank was included for analysis in every cooler submitted to the laboratory.

Rinsate Blanks

Rinsate blanks are samples of deionized and distilled analyte free (Reagent Grade Type II) water that are prepared in the field by pouring water over or through decontaminated field sampling equipment[8], prior to the collection of the environmental samples. The QA/QC review identifies rinsate blank detections of target analytes and evaluates the effect of the detections on associated sample results for possible cross-contamination during sample collection. Rinsate blank samples were collected and analyzed at a rate of approximately 5% of samples for petroleum hydrocarbon parameters (BTEX, VPH_w, and $LEPH_w$).

Precision

Precision measures the reproducibility of repetitive measurements and is usually expressed in terms of imprecision. It is strictly defined as the degree of mutual agreement among multiple independent measurements as the result of repeated application of the same process under similar conditions.

Analytical precision is a measurement of the variability associated with the duplicate (*i.e.,* two) or replicate (*i.e.,* more than two) analyses of the same sample in the laboratory, and is determined by the analysis of matrix spike duplicate or laboratory duplicate samples.

Total precision is a measurement of the variability associated with the entire sampling and analysis process. It is determined by the analysis of duplicate or replicate field samples and incorporates any variability introduced by the analytical procedure, sample collection and handling procedures, and matrix factors. Precision data must be interpreted by taking into consideration these possible sources of variability.

Duplicate field samples were collected, and duplicate spiked or unspiked samples were analyzed to assess analytical precision. The results were assessed using the relative percent difference (RPD) between duplicate measurements. The equation used to calculate RPD for duplicate samples is:

[8] Throughout the 2020 and 2021 sampling programs, the decontaminated equipment used for the collection of the rinsate blanks included the oil/water interface meter.

$$RPD = \frac{(A - B)}{((A + B)/2)} \times 100$$

where:

A	=	analytical result
B	=	duplicate result.

Note that for RPDs the result can be a positive or a negative value. RPDs are often presented as *absolute* RPDs, in which case the absolute value of the RPD is reported, always resulting in a positive number. Reporting the absolute RPD results in a reduction in information, since, for instance, if a duplicate sample consistently returned higher results than the original sample, all RPD values would be negative and it may be an indication of a precision problem. In this case, if absolute RPD was reported, no indication would be forthcoming.

Total precision was determined by collecting field duplicate samples. These samples were collected and analyzed at a rate of approximately 10% of total samples for each analytical suite.

Analytical precision will be determined in the laboratory by running matrix spike/matrix spike duplicate (MS/MSD) pairs, or by running laboratory duplicate analyses. These samples will be analyzed at a rate of approximately 5% for each analytical suite.

Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error (*e.g.,* variability due to imprecision) and systematic error (*e.g.,* bias). Therefore, accuracy reflects the total error associated with a measurement. A measurement is accurate when the value reported does not differ beyond acceptable limits from the true value or known concentration of the spike or standard. Acceptance criteria are indicated in the individual standardized analytical methods.

Analytical accuracy is typically measured by determining the percent recovery of known target analytes that are spiked into a field sample (*i.e.,* a surrogate or matrix spike), or reagent water (*i.e.,* laboratory control sample [LCS] or blank spike) before extraction at known concentrations. Percent recovery is calculated as:

$$\%REC = \frac{A}{B} \times 100$$

where:

A	=	obtained value
B	=	true value.

Analytical accuracy was determined in the laboratory by the running of MS samples or laboratory control samples. These samples were analyzed at a minimum rate of 5% for each analytical suite.

Completeness

Completeness for this investigation was defined as the percentage of valid analytical results. Results made uncertain due to missed hold times, improper calibration, blank contamination, or poor calibration verification results would be deemed invalid. Results that may be flagged due to matrix effects are not considered invalid. Completeness for projects should exceed 90%. Completeness is calculated by:

$$completeness = \frac{A}{B} \times 100$$

where:

A	=	number of valid analytical results
B	=	total number of analytical results.

Appendix E

Photographic Log of FPTS Inspections

APPENDIX E: PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project Number:**
Parkland Refining (B.C.) Ltd.	Foreshore – Downgradient Area 2, Parkland Refinery, Burnaby, BC	60653584

Photo No.	**Date:**
1	March 3, 2021

Direction Photo Taken:

Looking down at exposed geogrid associated with the Eastern FPTS

Description:

Example of exposed geogrid at contact point between the rip rap and cobble interface in the Eastern FPTS, approximately half way between PW17-29 and PW17-24.

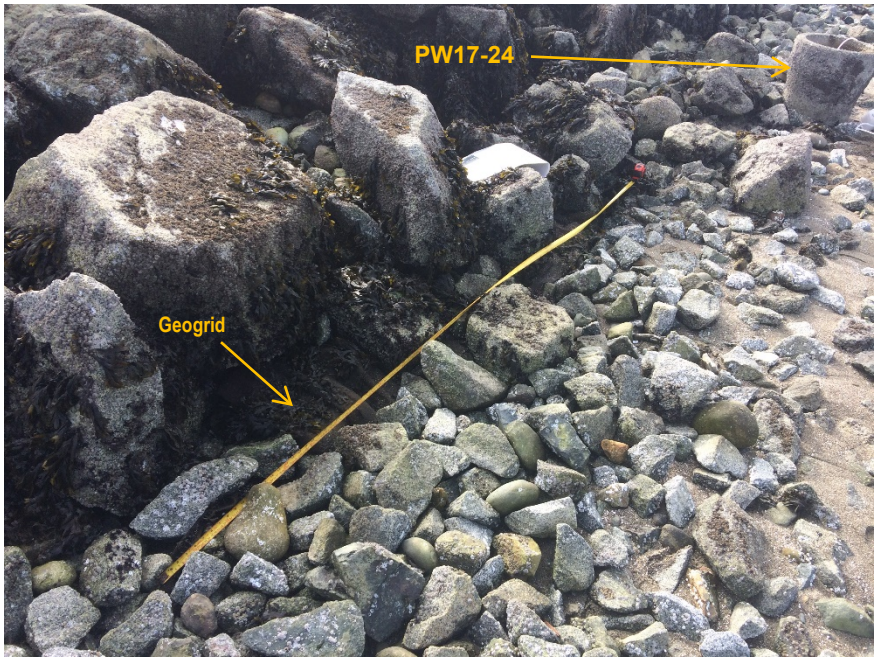

Photo No.	**Date:**
2	March 3, 2021

Direction Photo Taken:

Looking down at exposed geogrid associated with the Eastern FPTS

Description:

Zoomed in example of exposed geogrid at contact point between the rip rap and cobble interface in the Eastern FPTS, approximately half way between PW17-29 and PW17-24.
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APPENDIX E: PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project Number:
Parkland Refining (B.C.) Ltd.	Foreshore – Downgradient Area 2, Parkland Refinery, Burnaby, BC	60653584

Photo No.	Date:
3	March 3, 2021

Direction Photo Taken:

Looking down at exposed geogrid associated with the Western FPTS

Description:

Example of exposed geogrid at contact point between the rip rap and cobble interface in the Western FPTS, approximately half way between PW17-3 and PW17-8.

Photo No.	Date:
4	March 3, 2021

Direction Photo Taken:

Looking down at exposed geogrid associated with the Western FPTS

Description:

Zoomed in example of exposed geogrid at contact point between the rip rap and cobble interface in the Western FPTS, approximately half way between PW17-3 and PW17-8.

APPENDIX E: PHOTOGRAPHIC LOG

Client Name: Parkland Refining (B.C.) Ltd.	**Site Location:** Foreshore – Downgradient Area 2, Parkland Refinery, Burnaby, BC	**Project Number:** 60653584

Photo No. 5	**Date:** March 3, 2021

Direction Photo Taken:

Down

Description:

CBP-6 with rip-rap missing from concrete base.

Photo No. 6	**Date:** March 3, 2021

Direction Photo Taken:
Looking west.

Description:

Eastern FPTS.

APPENDIX E: PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project Number:**
Parkland Refining (B.C.) Ltd.	Foreshore – Downgradient Area 2, Parkland Refinery, Burnaby, BC	60653584

Photo No.	**Date:**
7	March 3, 2021

Direction Photo Taken:
Looking south

Description:

Western FPTS.

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