Conceptual Site Model
Port Lands, Toronto

Prepared for

Waterfront Toronto

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CH2M HILL Canada Limited
245 Consumers Road
Suite 400
Toronto, ON M2J 1R3

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Acronyms and Abbreviations

µg/g	microgram per gram
µg/L	microgram per litre
ABN	acid base neutral
APEC	area of potential environmental concern
BTEX	benzene, toluene, ethylbenzene, and xylenes
CCME	Canadian Council of Ministers of the Environment
CH2M	CH2M HILL Canada Limited
cm	Centimeter
COC	contaminant of concern
CP	chlorophenols
CSM	conceptual site model
DCE	dichloroethylene
DNAPL	dense nonaqueous phase liquid
DCS	Decommissioning Consulting Services
ESA	environmental site assessment
F	fraction
F4G	F4 Gravimetric
GHD	GHD Limited
GHH	Gravimetric heavy hydrocarbon
GIS	geographic information system
LNAPL	light nonaqueous phase liquid
m	metre
m^3	cubic metre
m/d	metre per day
m/m	metre per metre
m/sec	metre per second
m/y	metre per year
masl	metres above sea level
mbgs	metre below ground surface
MDL	method detection limit
MOE	Ontario Ministry of the Environment (now the MOECC)
MOECC	Ontario Ministry of the Environment and Climate Change
MS	Microsoft
O. Reg.	Ontario Regulation
OCP	organochlorine pesticide

OTR	Ontario Typical Range
PAH	polycyclic aromatic hydrocarbon
PCA	potentially contaminating activity
PCB	polychlorinated biphenyl
PHC	petroleum hydrocarbon
QPESA	Qualified Person for ESA
RSC	Record of Site Condition
SCS	site condition standard
SG	silica gel
SLRA	screening level risk assessment
Table 1 Standards	Table 1: Full Depth Background Site Condition Standards
Table 3 Standards	Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use for coarse grained soils
Table 9 Standards	Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition for coarse grained soils
TKN	Total Kjeldahl Nitrogen
VOC	volatile organic compound
WT	Waterfront Toronto

Tab A. Conceptual Site Model

A.1 Conceptual Site Model for the Toronto Port Lands

In August 2015, Waterfront Toronto (WT) retained CH2M HILL Canada Limited (CH2M) to provide environmental consulting services associated with the development of an environmental, geotechnical, and hydrogeological strategy to support the revitalization of the properties known as the Port Lands (located within the City of Toronto, Ontario). The goals of the revitalization include enabling the repair of the effects of years of industrial activities and providing protection against the possibility of flooding, as much of the area is in the flood plain of the Don River.

The Port Lands is a 356 hectares (880 acre) area bound by the Keating Channel/Don River and Lake Shore Boulevard to the north, the Toronto Inner Harbour in the west, Leslie Street in the east, and Lake Ontario and Tommy Thompson Park to the south (See Figure 1). The Port Lands were created from reclamation activities that occurred from approximately 1913 to 1917. Material was dredged from the eastern end of the Toronto Harbour into the area that was formerly a portion of Ashbridges Bay (Golder, 1992a). A general overview of the Port Lands area and the area considered as part of this strategy assessment are shown on Figure 1.

This section provides a preliminary conceptual site model (CSM) that has been developed based on a review of historical and current environmental reports and data dated 1991 to present. This includes data that have been collected and compiled by WT and partners in a Microsoft (MS) Access database, in conjunction with the results of the recent GHD Limited (GHD) investigation (GHD, 2015). The purpose of the CSM is to provide a written and/or illustrative representation of the physical, chemical, and biological processes that control the transport, migration, and actual or potential impacts of contamination (in soil, air, groundwater, surface water, sediments, or a combination thereof) to human receptors, ecological receptors, or both.

Consolidated data have been reviewed and interpreted to develop this CSM, which is intended to provide a summary and overview of the current understanding of the subsurface site conditions including overall soil and groundwater quality. Through the use of linked database and geographic information system (GIS) systems, various spatial maps, and cross sections summarize the subsurface geology and hydrogeology of the Study Area. In addition, a series of tables and figures have been prepared to outline soil and/or groundwater concentrations (particularly in the land areas targeted for excavation and River Valley construction), to delineate impacts laterally and vertically, and to identify “hot spots”. Utility pathways and geological information have been incorporated, where available, to help describe the contaminant movement and pathways. Based on the review of available information completed as part of this assessment, a series of investigative data gaps in the characterization were identified. Additional information may be considered to assist in the evaluation of the data and to refine the CSM, which feeds into other linked project tasks including the SLRA and remedial options evaluation.

A.1.1 Potentially Contaminating Activities

The Port Lands consists of former industrial properties, some which have become vacant or been converted to commercial use. The Port Lands area was historically reclaimed from the eastern end of Toronto Harbour Commissioners land by filling Ashbridges Bay between the mouth of the Don River on the mainland and Fisherman’s Island to the south, between the late 1800s and early 1900s. The lands were primarily used for heavy-industrialized activities dating back to the early 1900s. Some of the land use included petroleum refining and storage, equipment manufacturing, steel foundries, liquid and solid waste management, vehicle maintenance/repair operations, and municipal services (that is, incineration and sewage treatment) (SLR, 2009). Numerous environmental investigations and studies conducted

within the area since the 1990s have identified widespread soil or groundwater contamination as a result of extensive historical industrial activities.

CH2M reviewed the WT provided Port Lands historical and current environmental reports to summarize and compile relevant information from previous investigations (where available) and to build on previous work. The review was used to develop a current understanding of potentially-contaminating activities (PCAs) and areas of potential environmental concern (APECs) that may warrant further assessment and/or management during future site redevelopment activities. Based on this review, the following PCAs, as defined under Ontario Regulation (O. Reg.) 153/04 were within the Study Area:

- 7 - Boat Manufacturing
- 8 - Chemical Manufacturing, Processing and Bulk Storage
- 9 - Coal Gasification
- 10 - Commercial Autobody Shops
- 11 - Commercial Trucking and Container Terminals
- 12 - Concrete, Cement and Lime Manufacturing
- 16 - Crude Oil Refining, Processing and Bulk Storage
- 18 - Electricity Generation, Transformation and Power Stations
- 20 - Explosives and Ammunition Manufacturing, Production and Bulk Storage
- 28 - Gasoline and Associated Products Storage in Fixed Tanks
- 30 - Importation of Fill Material of Unknown Quality
- 32 - Iron and Steel Manufacturing and Processing
- 33 - Metal Treatment, Coating, Plating and Finishing
- 34 - Metal Fabrication
- 36 - Oil Production
- 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
- 43 - Plastics (including Fiberglass) Manufacturing and Processing
- 44 - Port Activities, including Operation and Maintenance of Wharves and Docks
- 45 - Pulp, Paper and Paperboard Manufacturing and Processing
- 46 - Rail Yards, Tracks and Spurs
- 47 - Rubber Manufacturing and Processing
- 49 - Salvage Yard, including automobile wrecking
- 50 - Soap and Detergent Manufacturing, Processing and Bulk Storage
- 51 - Solvent Manufacturing, Processing and Bulk Storage
- 52 - Storage, Maintenance, Fueling and Repair of Equipment, Vehicles, and Material Used to Maintain Transportation Systems
- 55 - Transformer Manufacturing, Processing and Use
- 58 - Waste Disposal and Waste Management
- 59 - Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products

The PCAs are further identified and discussed in Table A1. Based on this list of PCAs, APECs were identified across the Port Lands and are further discussed in Section A.1.3.

A.1.2 Current and Future Land Use

At the time of report preparation, the Port Lands were zoned industrial and portions were being used as industrial and commercial properties, were vacant, or were being used (formally and informally) as recreational space (http://www.waterfrontoronto.ca/explore_projects2/port_lands). Lands had been used for industrial purposes since the early 1900s, when the area that was formerly part of the Ashbridges Bay was infilled with material dredged from the eastern end of the Toronto Harbour (Golder, 1992a). The current land use is shown on Figure 2. The proposed redevelopment for the Port Lands aims to rezone the

former industrial lands to parkland, residential, institutional, community, and commercial land uses. Figure 3 provides the proposed future land use based on information provided by WT.

A.1.3 Areas of Potential Environmental Concern

During the review of various historical and current environmental investigation reports, a number of APECs and PCAs were identified. Based on this review, 144 APECs attributable to onsite PCAs were identified within the Port Lands. Table A2 summarizes the APECs on the Site attributable to onsite PCAs. Figures 4A to 4E illustrate the APEC locations attributable to onsite PCAs for the Study Area.

A.2 Investigation Summaries

Various environmental investigations have been conducted within the Port Lands since 1991, either on behalf of WT or on behalf of existing companies and tenants within the area. Over 40 existing or current environmental reports were reviewed as part of this assessment. Table A3 provides a brief summary of details and key findings from these reports. The summaries are provided in chronological order, starting with the earliest historical report reviewed. Where applicable, the summaries include a description of the investigation objectives, the scope of work, investigation locations, and conclusions.

A.3 Area of Potential Environmental Concern Disposition

This section summarizes the assessment and evaluation based on reviews of the historical environmental reports. Table A2 describes each APEC identified in association with Port Lands and describes the historical and current environmental investigations that have occurred within the APEC boundaries. Table A2 is based on the information made available to CH2M during the report review.

The APECs and PCAs were summarized in spreadsheet format and includes the scope and available results of the historical and current subsurface investigation activities obtained for the Port Lands. APECs resulting from offsite PCAs were determined based on information obtained from historical reports and their potential to impact the Port Lands primarily in instances where impacted groundwater could be migrating from upgradient sources. In the far right column of the table summary, comments and conclusions are provided (such as “No sampling locations historical or current are associated with the APEC” or “historical and/or current sampling activities have captured the contaminants of concern within the APEC”).

At the time of report preparation, some areas of the Port Lands were vacant while other areas contained buildings. Based on a review of the available historical reports, numerous buildings were formerly present within the Port Lands. Without additional information, it is assumed that a majority of these foundations and former buildings, along with associated former underground utilities, may exist in-place below grade; therefore, additional building-related rubble may be present below grade within the Port Lands.

Limited information is available regarding underground utilities at the Port Lands. Potable water is municipally supplied. Based on current online information, electrical services appear to enter Port Lands buildings from overhead wires. Information related to other utilities such as natural gas, wastewater, and stormwater is based on details provided by MMM Group in their September 15, 2015 draft report (MMM Group, 2015).

A.4 Data Gaps

While compiling information for the CSM, CH2M identified a number of data gaps related to the historical land use information and historical and current environmental investigations that may warrant

further consideration during subsequent or future stages of the Port Lands redevelopment. These data gaps are summarized in Table A4 and explained herein.

Historical land use information on parts of the study area was missing. Although not included in this scope of work, to identify all PCAs and APECs on the Port Lands to incorporate them into the CSM, a Phase I environmental site assessment (ESA) should be conducted on the properties without historical information, including a records review (such as, Ecolog Environmental Risk Information Services searches, aerial photographs, fire insurance plans, and site plans), a site visit, and interviews with personnel knowledgeable about past and current activities. Based on future plans for the Port Lands, the properties would eventually require a Record of Site Condition (RSC) because the change to more sensitive land use would need a Phase One ESA (and Phase Two ESA), in accordance with O. Reg. 153/04. Properties that were found to lack this historical land use information are noted in Table A4.

CH2M received a previously compiled MS Access database that included chemistry data from a number of previous investigations. Upon reviewing this database, CH2M encountered a number of errors, missing data, and other impediments that affected the available dataset for use in developing the CSM, the screening level risk assessment (SLRA), and estimations of impacted areas to calculate soil volumes for supporting the earthworks portion of the Port Lands project. Some issues were able to be resolved but because of limited time and budget, CH2M was not able to confirm all included data were uploaded, checked, and verified for each investigation. This is especially true where reports were unavailable for review in the dataset. The remaining data gaps and issues associated with the dataset are listed in Table A4.

By reviewing the available historical land use information on the Port Lands, and previous investigations available to date and based on the APECs, CH2M identified areas where investigations were needed to determine if an APEC had associated soil or groundwater impacts were identified. Table A4 summarizes the APECs requiring investigations, which are limited to areas that have no sampling or are missing a specific medium (soil or groundwater). Areas where data are lacking for delineation are not considered a data gap, as full delineation is understood not to be required for this phase of the Port Lands project. Full delineation will ultimately be required if the land requires an RSC. Specific details on the APECs can be found in Table A2.

Data gaps associated with portions of the Study Area that have no sampling previously conducted (or no previous investigations available for review), or general items that would remove uncertainties or strengthen the dataset, were also noted. These have been briefly identified in Table A4.

A.5 Physical Setting

A.5.1 Geology

The geological conditions in the Port Lands have been divided into five main stratigraphic units:

1. Heterogeneous fill from ground surface up to 10.7 metres below ground surface (mbgs) that are composed of unconsolidated, gravel, sand, gravelly sand, sandy gravel, clay, silt, silty sand, and clayey silt. The fill may also contain debris, such as brick, glass, concrete, wood chips, charcoal and cinders.
2. A thick, poorly-graded native sand unit continuous across the Study Area that extends to bedrock. The native sand unit also contains silty sands, sand and gravel, and localized clay layers.
3. Discontinuous peat and organic layers up to 6.8 metres (m) thick. Peat and organic layers can be interbedded with sandy and silty layers at localized locations. The organics layers are discontinuous across the Study Area and can be found at different depths. The organics are usually located as

layers within the native sand, or can be found above or below the native sand. Organic layer surface elevation and thickness are shown in Figures 5 and 6.

4. Discontinuous native silt, clayey silt to clay till.

5. Georgian Bay Formation shale bedrock interbedded with limestone ranging from approximately 10.8 to 41.31 mbgs. The bedrock consists of light grey, thinly-bedded fissile shale, with frequent horizontal fractures, and interbedded with limestone. The upper 5 m of bedrock is described as highly to slightly weathered with clay infills and typically, highly fractured. The Rock Quality Designation has values ranging from 0 percent to 93 percent, indicating a very poor to excellent rock quality. The bedrock surface elevation is shown in Figure 7. A bedrock valley was identified in the land southeast of Commissioners Street and Cherry Street, with the top of the shale bedrock at approximately 40 mbgs.

Nine geologic cross sections were constructed and show the stratigraphic sections across the Study Area. Figure 8 shows the nine cross-section locations; Figures 9A through 9I are cross sections A-A', B-B', C-C', D-D', E-E', F-F', G-G', H-H' and I-I', respectively. As shown on several of the geological cross sections, information gaps exist where the bottom of the native sand exists, and the top of bedrock elevation has not been confirmed with boreholes (as shown by “To Be Confirmed” on geological cross sections). These gaps in the geology represent an uncertainty in the extent of the stratigraphic units, which in turn represents an uncertainty in the extent of the hydrostratigraphic units described in the following section.

A.5.2 Hydrogeology

Two main hydrostratigraphic units were found at the Study Area: an unconfined fill/native sand aquifer and a weathered bedrock aquifer. The hydraulic properties of the fill/native sand layers are expected to be similar, given their predominantly coarse granular materials. Based on this understanding and the apparent direct hydraulic connection between the two layers, groundwater will tend to flow horizontally and vertically within the fill/native sand layers, with the two layers acting as a single aquifer unit. The fill/native sand aquifer extends across the entire Study Area; however, the bottom of the native sand has not been confirmed in some areas of the Study Area. A weathered shale bedrock aquifer was identified underlying the fill/native sand aquifer. No aquitard separating the native sand and weathered shale bedrock units was identified, which means there may be a direct hydraulic connection between the two units.

Based on the recent investigations completed across the Study Area by GHD (GHD, 2015), a total of 97 monitoring wells were installed: 85 monitoring wells screened in the fill/native sand aquifer; and 12 wells in the bedrock aquifer. The hydraulic properties of the aquifers across the Study Area were evaluated from results of single-well response tests (slug tests) conducted by GHD in August 2015 and December 2015. GHD conducted slug tests on 31 new monitoring wells screened in the fill. The calculated hydraulic conductivity values from slug tests ranged from 2.2×10^{-6} to 8.8×10^{-4} metres per second (m/sec) for sandy fill (geometic mean 1.1×10^{-4} m/sec), and 1.5×10^{-7} to 7.5×10^{-6} m/sec for clay and silt fill (geometric mean 1.8×10^{-6} m/sec). The hydraulic conductivity results demonstrate that lower conductivity layers exist within the fill layer, and the higher conductivity of the fill falls within the hydraulic conductivity range of the native sand.

GHD conducted slug tests in eight native sand aquifer monitoring wells across the Study Area. The calculated hydraulic conductivity values ranged from 3.1×10^{-5} to 8.7×10^{-4} m/sec. The geometric mean of the hydraulic conductivity within the native sand aquifer is 1.46×10^{-4} m/sec. This hydraulic conductivity is similar to the geometric mean hydraulic conductivity for the sandy fill which provides support for combining the two stratigraphic units into one hydrostratigraphic unit.

Seven monitoring wells were screened within or across organic layers consisting of peat, organic silt or organic clay. Hydraulic conductivity of the organic layers ranged from 3.6×10^{-7} to 1.7×10^{-4} m/sec

(geometric mean of 1.5 x 10^{-5} m/sec). The hydraulic conductivity of the organics, at the higher end, fall within the same range of conductivities for the native sand.

GHD conducted slug tests in four wells (MW27A-15, MW31A-15, MW35A-15, and MW39A-15) screened in the shale bedrock. Hydraulic conductivity values ranged from 8.9 × 10^{-7} m/sec to 3.2 × 10^{-5} m/sec (geometric mean 8.2 x 10^{-6} m/sec).

The results of the slug tests to date indicate a fast to very fast hydraulic response for coarse textured deposits (fill, sand, and sand and gravel), and for some of the organic layers.

Table A5 summarizes the hydraulic conductivity testing completed at the Study Area.

Table A5. Summary of Hydraulic Conductivity

Hydrostratigraphic Unit	Hydraulic Conductivity (m/sec)		
	Minimum	Maximum	Geometric mean
Fill (Sand)	2.21 × 10^{-6}	8.75 × 10^{-4}	1.14 x 10^{-4}
Fill (Silt and Clay)	1.49 × 10^{-7}	7.49 × 10^{-6}	1.76 x 10^{-6}
Organics Layers	3.64 x 10^{-7}	1.68 x 10^{-4}	1.49 x 10^{-5}
Native Sand Aquifer	3.05 x 10^{-5}	8.70 x 10^{-4}	1.46 x 10^{-4}
Upper Weathered Bedrock Aquifer	8.87 × 10^{-7}	3.21 × 10^{-5}	8.21 x 10^{-6}

On September 1, 2015 and December 8, 2015, groundwater elevation 'snapshots' were conducted across the new GHD monitoring well network measuring the depth to groundwater in the fill/native sand aquifer, which ranged from 1.01 to 4.96 mbgs (74.80 to 76.06 metres above sea level [masl]) in September and 0.37 to 5.38 mbgs (74.43 to 76.84 masl) in December (Table A6; Figure 10A and 10B). In July 2013, an investigation by Decommissioning Consulting Services (DCS) found the depth to groundwater in the fill/native sand aquifer ranged from 0.2 to 2.34 mbgs (DCS, 2014) (Figure 10C). A review of historical investigation reports shows that between October 1991 and September 2014, groundwater elevations in the fill/native sand aquifer were reported to be 74.22 to 77.49 masl. These historical measurements provide the expected range of water levels and across the Study Area and indicate the seasonal variations that may be found in the water level data.

Groundwater elevations in the fill/native sand aquifer on September 1, 2015 appear to be influenced by the level of Lake Ontario, including the Keating Channel and Shipping Channel to the north and south, respectively. Within the fill/native sand aquifer, groundwater generally flows from east to west toward Lake Ontario, with localized northern and southern flow from the middle sections of the Study Area in the general direction of the Keating Channel and Shipping Channel (Figure 10A). Similar groundwater flow conditions were observed on March 9, 2009 by SLR Consulting Canada Ltd. (SLR, 2009) (Figure 10D). Based on the SLR piezometric contours in 2009, the horizontal hydraulic gradient of the fill/native sand aquifer across the Study Area was estimated to range between 0.003 and 0.007 metres per metre (m/m). Based on the September 1, 2015 piezometric contours, the horizontal hydraulic gradient of the fill/native sand aquifer is estimated to range between 0.004 and 0.0008 m/m. On September 1, 2015, groundwater elevations within the fill/native sand aquifer were on average approximately 0.2 m higher than the Lake Ontario mean daily surface elevation of 75.02 masl from the Fisheries and Oceans Canada Tidal Observations Station Toronto #13320.

Based on the December 8, 2015 piezometric contours in the fill/native sand aquifer, the average horizontal hydraulic gradient is calculated to be 0.005 metre per metre (m/m). The groundwater gradient continues to be generally flat, with groundwater elevations in the fill/native sand aquifer close

to the level of Lake Ontario. Groundwater flow is radially outward towards the Toronto Harbour, Keating Channel, and Shipping Channel.

Lake Ontario exhibits a major hydraulic influence on groundwater elevations within the hydrostratigraphic units across the Study Area. Review of historical groundwater elevations at 150 Commissioners Street over three different groundwater monitoring events compared with historical Lake Ontario surface elevations (Figure 11) shows that in part, groundwater elevations are controlled by the surface elevation of Lake Ontario. Groundwater elevations correspond to the surface elevation of Lake Ontario, with a rise in Lake Ontario leading to a rise in groundwater elevations in the fill/native sand aquifer, and a decline in Lake Ontario leading to lower groundwater elevations in the fill/native sand aquifer.

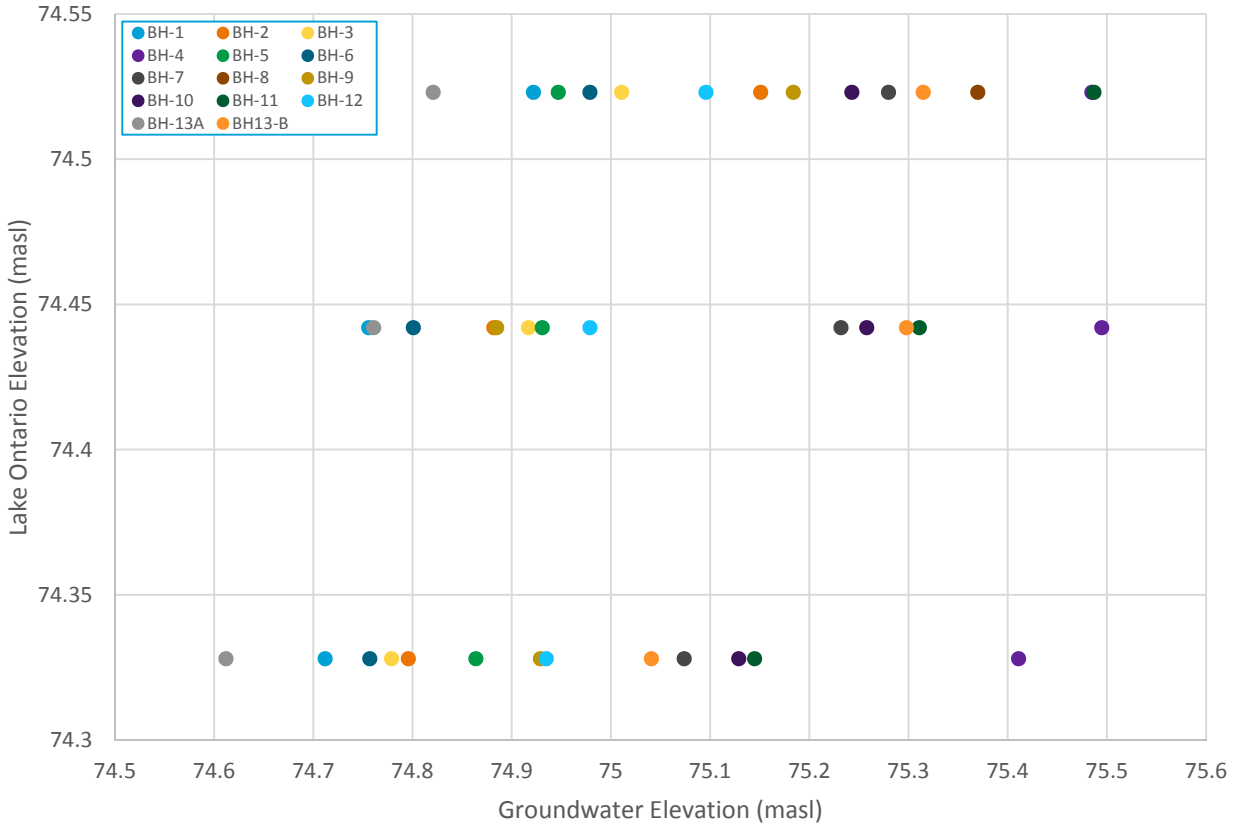

Figure 11. Lake Ontario Surface Elevation versus Groundwater Elevation at 150 Commissioners Street
Waterfront Toronto – Port Lands

Across the Study Area, 12 monitoring wells were screened in the shale bedrock. The groundwater potentiometric surface maps for the upper weathered bedrock aquifer (Figure 12A and 12B) were generated from measurements taken on September 1, 2015 and December 8, 2015, with groundwater elevations ranging between 74.42 to 75.16 masl over both events. Upper bedrock groundwater flow direction depicts groundwater flowing east to west, towards Lake Ontario, with a horizontal gradient of 0.0005 m/m for the September event and a southerly direction towards Lake Ontario, with a horizontal gradient of 0.001 m/m for the December event.

In September 2015, downward hydraulic gradients were generally observed from the fill to the native sand layers, with a geometric mean downward vertical gradient of 0.04 m/m. However in several locations across the Study Area, upwards hydraulic gradients were calculated from the native sand to fill layers (nested monitoring wells MW1-15, MW2-15, MW3-15, MW8-15, MW26-15, MW31-15, MW34-15) (Table A7). Based on the hydraulic properties of the fill/native sand layers being similar and the direct hydraulic connection between the two layers, groundwater will tend to flow horizontally and vertically

within the fill/native sand layers, with the two layers acting as a single aquifer unit. Generally, downward hydraulic gradients also exist between the native sand layer and the upper-weathered bedrock, which defines the recharge area. The exception is at three nested monitoring well locations (MW30-15, MW35-15, and MW40-15), a groundwater discharge area is indicated where upward hydraulic gradients are calculated to range between 0.001 to 0.004 m/m. Vertical groundwater flow velocities calculated using the September 2015 data are estimated to range between 1 and 984 metres per year (m/y) (Table A7).

Based on the geometric mean of 12.61 metres per day (m/d) hydraulic conductivity calculated for the native sand (used as a conservative conductivity for the fill, the hydraulic gradients described previously and porosities of 30 percent for the fill/native sand and 2 percent for the bedrock, horizontal groundwater velocities range from 12 to 77 m/y for the fill/native sand aquifer, and 6 m/y for the upper weathered bedrock aquifer. These calculations are based on a geometric mean hydraulic conductivity of 0.71 m/d (Table A8).

Table A8. Horizontal Groundwater Flow Velocities

Parameter	Symbol	Units	Fill / Native Sand	Fill / Native Sand	Fill / Native Sand	Fill / Native Sand	Fill / Native Sand	Fill / Native Sand	Bedrock
Hydraulic Gradient	i	m/m	0.002	0.005	0.001	0.004	0.001	0.0008	0.0005
Hydraulic Conductivity	K	m/d	31.02	31.02	31.02	31.02	31.02	31.02	0.71
Porosity	Φ	m/m	0.3	0.3	0.3	0.3	0.3	0.3	0.02
Groundwater Velocity	v	m/d	0.2068	0.5170	0.1034	0.4136	0.1034	0.0827	0.0178
Groundwater Velocity	v	m/y	75	189	38	151	38	30	6

In December 2015, downward hydraulic gradients were generally observed from the fill to the native sand layers, with a geometric mean downward vertical gradient of 0.06 m/m. However, in several locations across the Site, upwards hydraulic gradients were calculated from the native sand to fill layers (nested monitoring wells MW1-15, MW2-15, MW26-15, MW27-15, and MW36-15) (Table G3). As in September 2015, downward hydraulic gradients between the native sand layer and the upper weathered bedrock continued to be measured in December 2015. The exception is at two nested monitoring well locations (MW27-15 and MW33-15) indicate a groundwater discharge area, where upward hydraulic gradients are calculated to range between 0.003 to 0.013 m/m. All groundwater is expected to eventually discharge to Lake Ontario under existing conditions, either through direct discharge or discharge to the Keating Channel or the Shipping Channel. Vertical groundwater flow velocities calculated using the December 2015 data are estimated to range between 1 and 1,185 m/y (Table A9).

Based on the geometric mean of 12.61 m/d hydraulic conductivity calculated for the native sand (used as a conservative conductivity for the fill), the described hydraulic gradients, and the porosities of 30 percent for the fill/native sand and 2 percent for the bedrock, horizontal groundwater velocities are estimated to range from 77 m/y for the fill/native sand aquifer, and 13 m/y for the upper weathered bedrock aquifer based on a geometric mean hydraulic conductivity of 0.71 m/d.

A.6 Soil Quality

Soil quality has been defined at various properties within the Port Lands by various historical investigations dating back to 1991. The most recent data was obtained from the GHD investigations (2015 and 2016), which included the advancing of 179 boreholes and excavating six test pits between July 28 and December 11, 2015. Four hundred and thirty four soil samples were collected (including field duplicates and trip blanks) and submitted for laboratory analysis of one or more of the following:

- Volatile organic compounds (VOCs)
- Petroleum hydrocarbons (PHCs)
- Polycyclic aromatic hydrocarbons (PAHs)
- Metals and inorganics

During the GHD field activities, there was evidence of free product on soils at one monitoring well location (MW28-15 from 3.3 to 7.0 mbgs) (GHD, 2015) and at five test pits (TP01-15 through TP05-15) (GHD, 2016), which were advanced to investigate free product observed at a number of monitoring wells (further discussed in Section A.7). Available historical data combined with the recent GHD investigation provided over 300 locations and over 1,000 soil samples that were consolidated into a linked database and GIS systems to provide a summary of the soil quality on the Port Lands. As noted in Section A.4, a number of issues were identified associated with the data included in the database provided, and included erroneous data unable to be corrected with the limited timelines and budget of the project. This included missing qualifiers for all the SLR data uploaded, and should be noted when reviewing the summarized soil and groundwater quality sections. Also, the summaries did not account for the difference in elevation between historical and current sampling (that is, Villiers Street and biopiles).

In general, widespread impacts were observed across the Study Area that were related to various contaminants of concern (COCs), based on the many former industrial operations on the Port Lands. PHCs were observed to be the predominant COC; widespread across most of the Study Area, and found at very high concentrations in some locations. Metals and inorganics also encompassed a large majority of the impacts in the fill, and extended to approximately 4.5 mbgs, located in a few localized areas with deeper impacts.

Soil quality results were first compared to the Ontario Ministry of the Environment and Climate Change (MOECC) Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Ground Water Condition for coarse grained soils (Table 9 Standards) (MOECC, 2011b). The comparison was done based on the Port Lands' current uses and future plans; on the Study Area lands location near either Lake Ontario, the Keating Channel, the Shipping Channel; and the planned rerouting of the Don River. As the Table 9 Standards are fairly stringent, the soil quality was also compared to the Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/ Institutional Property Use for coarse grained soils (Table 3 Standards) (MOECC, 2011b) to provide context for any exceedances of the Table 9 Standards, and also as it is the applicable site condition standards (SCS) for areas further than 30 m from the water bodies. Lastly, as a SLRA is taking place for the Port Lands, the soil quality was compared to the S-GW3 soil component values, which account for the exposure pathway because of movement from soil to groundwater, then to aquatic receptors in a surface water body. This S-GW3 criterion was used to define areas that would need remediation because CH2M assumes soils less than this criterion but greater than the Tables 3 and 9 Standards will be addressed through risk management measures. It is noted that there are no S-GW3 component values for inorganic parameters with the exception of mercury and cyanide. No exceedances of mercury occurred in the Study Area, and the criterion for the latter is a value less than the Table 3 or 9 Standards. Therefore, it was not used to determine areas for remediation.

Soil with high pH was found within the Port Lands as noted in Section A.6.1; however, the Table 1: Full Depth Background Site Condition Standards (Table 1 Standards) were not used to compare the data, as

all areas of the Port Lands would be shown as impacted and the comparison would not provide the context needed for the scope of the project. However, as this would be the applicable criteria should the pH in those areas not be removed or remediated, consideration should be noted for future soil management activities.

The soil quality summary is separated into four depth intervals based on depth from the ground surface, which correspond to the sampling intervals where GHD focused their investigations (GHD, 2015 and 2016). Surface soil, defined as soil with depths up to 1.5 mbgs and described in Section A.6.1, conservatively includes soil samples with depth intervals straddling 1.5 mbgs. Subsections included areas within the Port Lands that have large amounts of imported fill placed above the grade, which will potentially be moved and used for fill in other parts of the Port Lands as part of the future rerouting of the Don River. Soil from depths of 1.5 to 4.5 mbgs is described in Section A.6.2, soil from depths of 4.5 to 7.5 mbgs is described in Section A.6.3, and soil at depths greater that 7.5 mbgs is described in A.6.4.

Contaminant distribution figures outlining locations where one or more soil samples exceeded the Tables 3 and 9 Standards at each of the soil intervals are shown on Figures 13A through 13S. The soil results are provided in Appendix A1 and are compared to the Tables 3 and 9 Standards. The results are discussed in detail in the following subsections.

A.6.1 Surface Soil (up to 1.5 mbgs) Quality Assessment and Extent of Impact

Over 300 samples were collected from depths up to 1.5 mbgs, based on data presently available in the database. It is noted that four samples with unknown depth ranges (MTE MW4-08 and three samples from the Terrapex MW101 location) were included within this depth-range assessment because no additional information was provided to distinguish exactly at what depth they were collected. Surface soil that exhibited a pH value exceeding the applicable range of 5 to 9 was found in the following 22 locations across the Study Area:

DCS BH-103	MW27A-15	SLR BH114	SLR BH125	SLR BH168
DCS BH-105	MW8A-15	SLR BH121	SLR BH127	SLR BH170
DCS BH-111	MW28C-15	SLR BH122	SLR BH137	
DCS BH-113	SLR BH106	SLR BH123	SLR BH142	
GAL - BH 14-1 (130)	SLR BH108	SLR BH124	SLR BH159	

Surface soil data for PHCs were collected from approximately 100 samples across the Port Lands and the following characterization is based on the results of these data points. PHCs are found to occur at concentrations exceeding the Tables 3 and 9 Standards across the Study Area at areas north of Polson Street, east and west of Cherry Street, south of Villiers Street and some east of the Don Roadway as shown on Figure 13A. Table 9 and 3 Standards exceedances are approximately 60 percent of the surface soil locations analyzed. Maximum concentrations were found at CH2MHILL BH-168 (fraction [F]1 – 8,840 micrograms per gram [µg/g]) at the Villiers Street property, and at SLR BH144 (F2 – 16,000 µg/g), BH74-15 (F3 – 6,700 µg/g) and SLR BH138 (F4 – 30,000 µg/g) on the former Imperial Oil lands.

The greatest volume of impacted soils appear to be centralized over the lands commonly referred to as “former Imperial Oil lands,” which had been occupied by a number of oil companies since 1925. Historical spills had been noted and a light nonaqueous phase liquid (LNAPL) recovery systems operated in the 1990s. Soils in this area exhibit concentrations of PHCs exceeding the S-GW3 criteria and will require remediation. The extent of this surficial impacted soil is difficult to define with the limited soil samples taken within the first 1.5 mbgs, and additional sampling would be warranted to assist in developing the estimated extent and volume of soil potentially requiring remediation and management. Additional areas exceeding the S-GW3 criteria in the surface soils include an area around CH2MHILL BH-162, CH2MHILL BH-168, and MW20A-15 in the Villiers Street property; in an area east of the

Don Roadway and north of Commissioners Street around BH155-15, BH127-15, and BH124-15; and in an area southeast of the Don Roadway and Villiers Street intersection around BH126-15.

VOCs detected in the over 100 surface soils collected at the Port Lands, exceeding the Tables 3 and 9 Standards were largely benzene, toluene, ethylbenzene, and xylenes (BTEX), with the greatest concentrations (xylenes up to 11,000 µg/g) found at locations with PHC impacts (CH2MHILL BH-162, CH2MHILL BH-168, and MW20A-15) in the Villiers Street property. Some BTEX concentrations at these locations were also above the S-GW3 criteria. Other VOC concentrations above the Tables 3 and 9 Standards, including n-hexane, were reported above the Tables 3 and 9 Standards. The highest concentrations (54 µg/g) were above S-GW3 criteria and found in the former Imperial Oil Lands, and found in some chlorinated VOCs at BH74-15, MW20A-15 and MW33-15. A large number of VOCs had method detection limits (MDLs) exceeding the Tables3 and 9 Standards and S-GW3 criteria, mainly at locations where the sample had to be diluted because of high PHC or VOC concentrations. Locations with VOC exceedances are shown on Figure 13B.

PAHs in the shallow soil were found exceeding the Tables 3 and 9 Standards in approximately 60 percent of the 120 locations, with the greatest concentration found at MW17-15, located within the former imperial Oil Lands. The parameters with the greatest concentrations were methylnaphthalenes with 214 µg/g, fluoranthene with 205 µg/g, and pyrene with 171 µg/g. Areas exceeding the S-GW3 criteria differed slightly as the values for acenaphthylene and anthracene were very low (0.093 µg/g and 0.22 µg/g) compared to other PAH, and a number of exceedances occurred at 37 locations across the Study Area. The only other parameters that exhibited S-GW3 exceedances were methylnaphthenes, which measured at five locations at concentrations between 85 and 144 µg/g, and located within the former Imperial Oil Lands. The exception is one location outside on the eastern end of the Study Area (BH124-15). Locations with PAH exceedances are shown on Figure 13C.

Approximately 75 percent of the 212 locations with surface soil samples collected for inorganics exceeded the Table 9 Standards and approximately 65 percent exceeded the Table 3 Standards at locations shown on Figure 13D. The highest concentrations for inorganic parameters most often occurred at Terrapex MW101 and MW22-15 located north of Lake Shore Boulevard; few parameters (chromium, vanadium and boron) at MW8A-15, located on the western limit of the Study Area at 20 Polson Street; and within the former Imperial Oil Lands at BH65-15 (nickel, lead and mercury)

Concentrations of lead were found at concentrations of up to 3070 µg/g at various locations across the Study Area. Other inorganics found at high concentrations were zinc (up to 1240 µg/g at MW22-15), chromium (up to 714 µg/g at MW8A-15), barium (up to 771 µg/g at MW22-15), copper (up to 972 µg/g at BH72-15), arsenic (up to 902 µg/g at MW22-15), and zinc (up to 1240 µg/g at MW22-15).

Polychlorinated biphenyls (PCBs) were sampled in the surface soil at 22 locations. Two locations detected concentrations marginally greater than the Tables 3 and 9 Standards: at DCS BH06-7(0.6 µg/g) and at DCS BH06-08 (0.5 µg/g). Locations exceeding the Tables 3 and 9 Standards are shown on Figure 13E. The other locations were less than the Tables 3 and 9 Standards.

Some acid base neutral (ABN), chlorophenol (CP), and organochlorine pesticide (OCP) parameters were analyzed as part of historical laboratory scans, and locations sampled were analyzed for one or more parameters. The exceedances of the Table 9 and 3 Standards were because of elevated MDLs, and there were no detected concentrations greater than these Standards. Locations of these samples with MDL exceedances are shown on Figure 13F.

A.6.1.1 Villiers Street Bioremediation Soil Piles

The following information was compiled from the Biopile Soil Sampling Summary Reports (JWSL, 2009; Stantec, 2013). The results have not yet been incorporated into the project database, so figures, tables, and risk assessment calculations will not include these data.

In 2007, approximately 31,750 cubic metres (m^3) of PHC- and BTEX-impacted soil were relocated from source sites to the Villiers Street 'Bioremediation site' with the intended plan to reuse the treated soil as backfill material. Bioremediation included mixing or 'turning' the soil with an Allu Bucket and the addition of nutrients to promote microbial growth and encourage the degradation process. A feasibility study (laboratory-scale) indicated the sustained rates for F2 and F3 biodegradation to be 9.9 to 11.7 µg/g per day.

Analytical results from 2009 indicated 60 percent of the biopile rows have been remediated to concentrations less than Table 3 Industrial/Commercial/Community Standards, and 12,700 m^3 of material still required further biodegradation. The 2013 results from the north portion of the Villiers Street site indicated that 5,600 of 11,000 m^3 met the Table 2 Residential/Parkland/institutional Standards. Sampling for both these events in 2009 and 2013 was limited to the first 1.0 or 0.3 mbgs, respectively.

A.6.1.2 Imported Shale at 101 Commissioners Street, and 1 and 17 Basin Street

A total of 37,260 m^3 of shale were imported to the area of the Port Lands addressed as 101 Commissioners Street and 1 and 17 Basin Street in 2012 and 2013. The collection and analysis of 141 samples took place during the removal of the material from the source site. The material met the Table 1 Standards (for all property uses other than agriculture). GHD conducted investigations within this area, but began the collection of their samples from below the imported material.

A.6.1.3 Imported Fill at 99 Commissioners

Soil was imported to the property at 99 Commissioners at some point after the 2008 SLR investigation, and was used to bring the elevation of the existing surface up approximately 2 to 2.5 m (based on the elevations of the SLR locations). The material was placed around the existing building and parking lot. Two samples were collected during the GHD investigation of the imported soil at BH91-15 and MW35B-15, which were analyzed for PHCs, PAHs, VOCs, and inorganics. There were no parameters with concentrations exceeding the Tables 3 or 9 Standards. Based on the limited sampling results, the material met the Table 1 Standards.

A.6.2 Soil Quality Assessment and Extent of Impact (1.5 to 4.5 mbgs)

Approximately 450 samples were collected from depths within 1.5 to 4.5 mbgs, based on data presently available in the database. The average depth of fill was noted to be approximately 4 to 4.5 mbgs within the Study Area, based on the GHD locations. One subsurface soil sample (BH119-15) collected from 3.05 to 3.66 mbgs, exhibited a pH value exceeding the applicable range of 5 to 11.

PHC samples (over 300) were collected from approximately 240 locations within the noted depth range, and approximately 60 percent of the locations were found above the Table 9 Standards and approximately 45 percent above the Table 3 Standards. Maximum concentrations were found at TP2 (14,700 µg/g) for both F1 PHCs, SLR BH138 (20,000 µg/g) for F2 PHCs, both occurring within the former Imperial Oil Lands; and BH109-15 (45,200 µg/g and 44,000 µg/g) for F3 and F4 PHCs occurring on 99 Commissioners at the southern end of the Study Area. Exceedances of the S-GW3 component values occurred across the Study Area as shown on Figure 13G, with highest concentrations occurring within the former Imperial Oil Lands.

Samples for VOC analyses were collected at approximately 240 locations for a total of over 370 samples. Just over 50 percent of the locations exhibited exceedances of the Table 9 Standards and 40 percent of locations exceeded the Table 3 Standards as shown on Figure 13H. Approximately 20 percent of those exceedances were because of elevated MDLs, and may be more as the SLR data lacked all laboratory qualifiers that would have indicated non-detect results. The highest-detected VOCs were from BTEX concentrations (xylenes up to 1,700 µg/g) found at the Villiers Street properties. The remaining VOCs that were above the S-GW3 component values included acetone (at 16 SLR locations, some may be

unidentified MDL exceedances), dichloromethane (460 µg/g at CH2MHILL BH-163), n-hexane (98 µg/g and 87 µg/g at BH61-15 and BH64-15 on the western portion of the former Imperial Oil Lands), 1,1,1-trichloroethane (38 µg/g at SLR146), and other VOCs under 10 µg/g at eight SLR locations.

PAHs were collected at approximately 280 samples within the 1.5 to 4.5 mbgs depth range at just over 200 locations, shown on Figure 13I. Seventy percent of the locations exceeded the Table 9 Standards; 60 percent of locations also exceeded the Table 3 Standards. The highest concentrations of PAHs were found at 54 Commissioners Street (naphthalene and methylnaphthalenes up to 570 µg/g), 80 Commissioners Street (naphthalene up to 210 µg/g) and 130 Commissioners Street (phenanthrene, naphthalene and methylnaphthalenes up to 390 µg/g). Similar to the shallower soil, most S-GW3 exceedances were due to low criteria for acenaphthylene and anthracene, and the remaining correlated with the higher concentrations of naphthalene, methylnaphthalenes, phenanthrene and fluorene at locations from 54 and 130 Commissioners and the former Imperial Oil Lands.

Approximately 200 samples from were collected from 150 locations for inorganics within this depth interval, with approximately 40 percent of locations exceeding the Tables 3 and 9 Standards. The highest concentrations of inorganic parameters were reported at MW22-15, with concentrations of barium, copper, lead and zinc over 25,000 µg/g. Other locations with concentrations above 1000 µg/g included a few within the former Imperial Oil Lands and north of Lakeshore Boulevard. Locations with exceedances of inorganics are shown on Figure 13J.

PCBs were sampled at 20 locations, and all results were less than the Tables 3 and 9 Standards.

All samples analyzed for ABNs, CPs, OCP, and other SVOCs were reported below the MDLs. Some of the reported MDLs were above the Tables 3 and 9 Standards and locations are shown on Figure 13K.

A.6.3 Soil Quality Assessment and Extent of Impact (4.5 to 7.5 mbgs)

Over 230 samples were collected at sample depths between 4.5 and 7.5 mbgs at approximately 170 locations across the Study Area and were included within this depth range assessment.

PHC samples were collected (approximately 180) from over 150 locations and found at concentrations exceeding the Tables 9 and 3 Standards at roughly 45 and 20 percent, respectively. The exceedances were located across the Study Area in the former Imperial Oil Lands, Villiers Street Properties, and on 54, 80, 90 and 101 Commissioners. Maximum concentrations for each PHC fraction were found at BH97-15 (F1 – 2,350 µg/g) and GAL-BH 14-1 (54) (F2 – 51,000 µg/g, F3 – 48,000 µg/g, and F4 – 4,400 µg/g). Exceedances of the S-GW3 component values occurred at 15 locations as shown on Figure 13L.

Samples for VOC analyses were collected at approximately 160 locations for a total of 200 samples. Approximately 30 and 35 percent of the locations exceeded the Tables 3 and 9 Standards, respectively, which include exceedances because of elevated MDLs. Detected concentrations account for approximately 20 percent of locations exceeding both Standards, shown on Figure 13M. Highest VOC concentrations within this depth interval were from BTEX and acetone, reported at 770 µg/g (ethylbenzene) and 300 µg/g (acetone), exceeding the S-GW3 criteria. Other VOCs found above the component values were below 10 µg/g at SLR BH136 (80 Commissioners) and SLR BH153 and 155 (former Imperial Oil Lands).

PAHs were collected at approximately 180 samples from more than 145 locations, with exceedances occurring over 40 percent of locations for Table 9 Standards and 25 percent for Table 3 Standards. Highest concentrations were found at 54 Commissioners Street for methylnaphthalenes, acenaphthalene, fluorene, naphthalene, phenanthrene and pyrene with concentrations up to 8,700 µg/g. S-GW3 exceedances (excluding those for acenaphthylene and anthracene), occurred at this location, as well as the former Imperial Oil Lands, 80 and 95 Commissioners (for methylnaphthalenes, fluorene, and naphthalene) as shown on Figure 13N.

Approximately 144 samples were collected from this depth range at 120 locations for inorganics, with exceedances occurring at only two locations: BH100-15 reported a concentration of cyanide (0.09 µg/g)

marginally over the Tables 3 and 9 Standards of 0.05 µg/g, and MW13-15 had a concentration of lead at 371 µg/g, exceeding the Tables 3 and 9 Standards of 120 µg/g. All other concentrations were found below both Standards. Exceedances are shown on Figure 13O.

A.6.4 Soil Quality Assessment and Extent of Impact (greater than 7.5 mbgs)

Fifty-five samples were collected from just over 40 locations at sample depths greater than 7.5 mbgs across the Study Area and were included in this depth-range assessment.

PHCs were sampled (over 50 samples) in this subsurface soil group at 40 locations. Approximately 35 percent of locations were impacted at levels exceeding the Table 9 Standards and approximately 20 percent were impacted at levels exceeding the Table 3 Standards. Impacted areas were generally found at the Villiers Street property, 54, 95 and 101 Commissioners Street, and the former Imperial Oil Lands (shown on Figure 13P). The maximum PHC concentrations found were: 2,600 µg/g for F1, 13,000 µg/g for F2 and 15,000 µg/g for F3 at SLR BH153, within the former Imperial Oil Lands. F4 PHCs did not exceed either Tables 3 or 9 Standards. Two locations exceed the S-GW3 criteria (SLR BH149, SLR BH153) and were both located in the northeastern quadrant of the former Imperial Oil Lands. The depth of impacts at these locations is unknown as these were the deepest samples (approximately 9 mbgs) and the boreholes terminated at this depth (in native sand).

VOCs detected in the subsurface soils greater than 7.5 mbgs were reported exceeding the Tables 3 and 9 Standards at 20 percent and 10 percent, respectively, and from over 50 samples collected at 40 locations. Concentrations exceeding were largely BTEX (similar to the overlying soil but at reduced concentrations), with the highest concentration at 400 µg/g for xylenes at SLR BH153. Other VOCs detected were all from SLR BH149 ranging from 10 to 500 µg/g, but may be unqualified MDL results. A number of VOCs had MDLs exceeding the Tables 3 and 9 Standards and S-GW3 criteria, mainly at locations where the sample had to be diluted. Exceedances of VOC are shown on Figure 13Q.

PAHs in soil were collected at approximately 50 samples from over 35 locations, and were found exceeding the Tables 3 and 9 Standards in approximately 15 and 10 percent of the locations, respectively. The greatest concentrations were found at SLR BH149 (8.53-9.14 mbgs), with PAHs up to 1,200 µg/g not found in surrounding samples. The parameters with the greatest concentrations were naphthalene, methylnaphthalenes, and phenanthrene. Areas exceeding the S-GW3 criteria were sample as one sample from 54 Commissioners Street (GAL - BH 14-4 (54)), shown on Figure 13R. All other locations analyzed did not exceed the S-GW3 component values.

Of the 46 samples collected from 34 locations for inorganics, only four locations exceeded the Tables 3 and 9 Standards for inorganics and were limited to cyanide (up to 0.16 µg/g) and electrical conductivity (2.5 microSiemens per centimetre). Chromium was less than the Table 3 Standards but exceeded the Table 9 Standard with elevated MDLs reported. All other reported concentrations were below both Standards. Exceedances are shown on Figure 13S.

A.6.5 Contaminants of Concern in Soil

COCs were identified for the soil based on chemicals with concentrations exceeding the Table 9 Standards or chemicals with no Table 9 Standards associated with a PCA. The Ontario Ministry of the Environment (MOE) (now MOECC) document entitled *Procedures for Use of Risk Assessment under Part XV.1 of the Environmental Protection Act* (Procedures Document) (MOE, 2005) indicates that at the discretion of the Qualified Persons for ESA (QPESA), chemicals without an applicable SCS may be included or excluded as COCs based on an understanding of geoscience, the potential for the chemical to limit the use of the site, or both.

A number of additional screening considerations were built into determining COCs for the Study Area, and the following was considered for the soil data:

- Analytical results for isomers of some parameters were sometimes reported as isomers only; therefore, the data were reviewed to confirm the summation of these results were compared to the Table 9 Standards and the overall parameter was correctly included or excluded (as appropriate) as a COC. The isomers included:
  - 1-methylnaphthalene
  - 2-methylnaphthalene
  - o-xylene
  - m,p-xylene
  - cis-1,3-dichloropropene
  - trans-1,3-dichloropropene
  - 2,4- dinitrotoluene
  - 2,6- dinitrotoluene
- The evaluation of PHC F1, F2, and F3 accounted for data reported with and without BTEX, naphthalene, and PAHs, respectively, as well as historical data that reported only bulk PHC F1, F2 and F3 results. For conservatism, the greatest reported PHC fraction concentration was applied to screen each fraction, regardless of whether naphthalene or PAH data were included in the result (that is, the greater concentration between PHC F1 or PHC F1 [minus BTEX], PHC F2 or PHC F2 [minus naphthalene], and PHC F3 or PHC F3 [minus PAH]).
- The evaluation of PHC F4 in soil considered analytical results for F4 Gravimetric (F4G)-silica gel (SG) (Gravimetric heavy hydrocarbon [GHH]-Silica). Laboratories analyze and report an F4G value in case the chromatogram tracing does not return to the baseline at or before the C50 carbon range. The greatest reported PHC F4 concentration was applied in accordance with Canadian Council of Ministers of the Environment (CCME) guidance (2008), which indicates the greater of the F4 and F4G value should be reported as the PHC F4 value.
- Chemicals detected in soil as part of the current and historical investigations included some naturally-occurring elements and minerals with no applicable MOECC Standards. Detected parameters in soil were ruled out as COCs where possible, using Ontario Typical Range (OTR) values for Region 3, as provided in Table 8.2 of the MOECC Rationale document (MOECC, 2011c) or the *Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Moss Bags and Snow* (MOECC, 1999) document. The OTR values are considered representative of upper limits of typical province-wide background concentrations that are not contaminated by point sources. An OTR was not available for zirconium in soil. An alternate average zirconium concentration obtained from the United States Geological Survey document entitled *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States* (Shacklette and Boerngen, 1984) was used for screening in the absence of an OTR. Detected parameters in groundwater were ruled out as COCs where possible using the 97.5 percentile of the Provincial Groundwater Monitoring Information System data, as provided in Table 8.4 of the MOECC Rationale document (MOECC, 2011c).
- Chemicals with no applicable MOECC SCS or available background concentration that were 100 percent nondetect in soil were examined further to determine whether the reported maximum was based on an elevated MDL. Chemicals that were 100 percent nondetect with nonelevated MDLs were not considered COCs, as they have not been detected in the Study Area. As the dataset comprises several years' worth of data, laboratory reporting limits and reporting accuracy may have changed over time. As such, the reported MDLs for each nondetect chemical without an applicable SCS were examined on a sampling event (date) basis. If all SDLs reported for the same sampling event were equal in value, the MDLs were considered to not be elevated. If one or more MDLs were higher than those from the same sampling event, the maximum SDLs were considered to be elevated, and the chemical was retained as a COC.
- Chemicals with no applicable MOECC SCS or available background concentration that were detected in soil and had no applicable MOECC SCS, or nondetect with elevated MDLs, were retained as COCs.

Chemicals detected at concentrations in soil greater than the Table 9 Standards include the following:

- Metals and Inorganics
  - Antimony
  - Arsenic
  - Barium
  - Beryllium
  - Boron
  - Boron (hot water extractable)
  - Cadmium
  - Chromium
  - Chromium, Hexavalent (Cr6+)
  - Cobalt
  - Copper
  - Cyanide
  - Electrical Conductivity
  - Lead
  - Mercury
  - Molybdenum
  - Nickel
  - Silver
  - Sodium Absorption Ratio
  - Thallium
  - Uranium (U)
  - Vanadium
  - Zinc
- PHCs
  - PHC F1 (C6-C10)
  - PHC F2 (C10-C16)
  - PHC F3 (C16-C34)
  - PHC F4 (C34-C50)
- VOCs
  - 1,1,1,2-Tetrachloroethane
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethane
  - 1,1-Dichloroethene
  - 1,2-Dibromoethane
  - 1,2-Dichlorobenzene
  - 1,2-Dichloroethane
  - 1,2-Dichloropropane
  - 1,3-Dichlorobenzene
  - 1,3-Dichloropropene
  - 1,4-Dichlorobenzene
  - 2-Butanone
  - 4-Methyl-2-Pentanone
  - Acetone
  - Benzene
  - Bromodichloromethane
  - Bromoform
  - Bromomethane
  - Carbon tetrachloride
  - Chlorobenzene
  - Chlorodibromomethane
  - Chloroform
  - cis-1,2-Dichloroethene
  - Dichloromethane
  - Ethylbenzene
  - Methyl tert-butyl ether (MTBE)
  - n-Hexane
  - Styrene
  - Tetrachloroethene
  - Toluene
  - trans-1,2-Dichloroethene
  - Trichloroethylene
  - Trichlorofluoromethane
  - Vinyl Chloride
  - Xylenes, Total
- PAHs
  - 1+2-Methylnaphthalenes
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b&j)fluoranthene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Dibenzo(a,h)anthracene
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-Cd)Pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- PCBs
  - PCBs, Total

Chemicals not detected at concentrations greater than the Table 9 Standards in soil, but with MDLs greater than the Table 9 Standards, include the following:

- Metals and Inorganics
  - Selenium
- ABNs
  - 1,1'-Biphenyl
  - 1,2,4-Trichlorobenzene
  - 2,4-Dimethylphenol
  - 2,4 and 2,6-Dinitrotoluene
  - 2-Chlorophenol
  - 3,3`-Dichlorobenzidine
  - 4-Chloroaniline
  - Bis (2-chloroethyl) ether
  - bis (2-Chloroisopropyl) ether
  - Diethylphthalate
  - Dimethylphthalate
  - Phenol
- Pesticides
  - Hexachlorobenzene
  - Hexachlorobutadiene
  - Hexachloroethane
- CPs
  - 2,4,5-Trichlorophenol
  - 2,4,6-Trichlorophenol
  - 2,4-Dichlorophenol
  - Pentachlorophenol
- VOCs
  - Dichlorodifluoromethane

Chemicals with concentrations detected in soil and no applicable MOECC standard include the following:

- Chemistry
  - Ammonia
  - Bromide
  - Chlorite
  - Fluoride
  - Nitrate (as N)
  - Nitrite (as N)
  - Perchlorate
  - Sulfate
  - Total Kjeldahl Nitrogen (TKN)
- Metals and Inorganics
  - Aluminum
  - Calcium
  - Chloride (Cl)
  - Iron
  - Magnesium
  - Manganese
  - Phosphorus
  - Potassium
  - Sodium
  - Strontium
  - Titanium
  - Zirconium

OTR values were available for all the parameters listed herein under the metal and inorganics (with the exception of zirconium), as well as for TKN, nitrate and nitrite, and fluoride. An alternate source entitled *Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States* (Shacklette and Boerngen, 1984) was used for screening zirconium in the absence of an OTR, which gave a reference average concentration of 48 parts per million. Of these parameters screened, calcium, chloride, magnesium, sodium, and strontium were retained as COCs as their concentrations exceeded the OTR values. Ammonia, bromide, chlorite, sulfate and perchlorate were also retained as COCs because of the lack of OTR values or alternate screening methods.

Chemicals that were not found above the MDLs with no applicable MOECC standard include the following:

- Chemistry
  - Ortho-Phosphate
- SVOCs
  - 2-Chloroethyl Vinyl Ether
  - 2-Chloronaphthalene
  - 2-Hexanone
  - 4-Bromophenyl Phenyl Ether
  - 4-Chlorophenyl Phenyl Ether
  - Bis (2-chloroethoxy) methane
  - Butyl benzyl phthalate
  - Chloroethane
  - Chloromethane
  - Di-n-butylphthalate
  - Di-n-octyl phthalate
  - Isophorone
  - Nitrobenzene
  - N-Nitrosodi-n-propylamine
  - N-Nitrosodiphenylamine
  - Hexachlorocyclopentadiene

As noted herein, chemicals that were not found above the MDLs and without applicable MOECC Standards were only retained as COCs if the MDLs were elevated; therefore, the following parameters from the provided list were retained as COCs: 2-chloroethyl vinyl ether, 2-hexanone, chloroethane, and chloromethane.

Table A10 summarizes the chemicals retained as COCs in soil based on the evaluation provided.

A.7 Groundwater Quality

Groundwater quality from the GHD 2015 Port Lands investigation (GHD, 2015 and 2016) was used as an indicator of current conditions, with historical data noted for supporting either gaps in data or confirming extents of impacts. Between July and November, 2015, GHD installed approximately 97 groundwater monitoring wells, consisting of 12 bedrock wells and 85 overburden wells (15, 40, and 30 wells to approximate depths of 10 mbgs, 7 mbgs, and 3 mbgs, respectively). GHD collected groundwater samples for analysis of VOCs, PHCs, PAHs, and metals and inorganics. There was evidence of PHC sheen at 10 monitoring wells and measured LNAPL at six monitoring wells ranging in thickness from 5 to over 100 centimetres (cm). One well (MW28C-15) additionally displayed evidence of dense nonaqueous phase liquid (DNAPL) (GHD, 2015). Including the historical investigations with available data to use for this review, approximately 218 monitoring wells have been installed throughout the Port Lands at varying depths ranging from 0.35 to 32.9 mbgs.

As noted in the previous section, based on the current use and future plans of the Port Lands, the MOECC Table 9 Standards (for within 30 m of a waterbody) and Table 3 Standards were used to assess the groundwater quality within the Study Area. The groundwater results are provided in Appendix A2 with comparison to both sets of Standards, and are discussed in detail in the following subsections. This discussion of overburden groundwater quality has been broken down into three sections (shallow, intermediate, and deep) corresponding to the three depths that GHD installed at the various wells across the site at (3 mbgs, 7 mbgs, 10 mbgs). This provides a perspective on the depths of impact and to show how the groundwater quality varies across the overburden aquifer at these depths. Additionally, a separate section for the bedrock groundwater follows for discussion of impacts to this lower aquifer.

Contaminant distribution figures outlining locations where one or more shallow, intermediate or deep groundwater sample has been detected exceeding the Tables 3 and 9 Standards in the fill/native aquifer are shown on Figures 14A through 14L, and contaminant distribution figure for the bedrock aquifer are shown on Figures 14M through 14L.

A.7.1 Shallow Overburden Groundwater Quality Assessment and Extent of Impact

Groundwater data that were collected from monitoring wells installed at approximately 3 mbgs were collectively assessed and summarized to determine the quality of the groundwater in the shallow overburden. The most recent groundwater quality from the GHD 2015 Port Lands investigation (GHD, 2015 and 2016) was used as an indicator of current conditions, with historical data noted for supporting either gaps in data or confirming extents of impacts.

PHCs were found exceeding the Tables 3 and 9 Standards across the Port Lands, with 23 of 38 locations analyzed exceeding the Table 9 Standards as shown on Figure 14A. The following maximum concentrations found for each of the fractions in the groundwater monitoring wells during the 2015 sampling: 13,400 micrograms per litre (µg/L) of F1 at MW29C-15 and 200,000 µg/L of F2, 270,000 µg/L of F3, and 53,000 µg/L of F4 at BH144 (existing location, assumed to be BH144 from the 2008 SLR investigation). It is noted that the PHC concentrations reported from BH144 during the 2015 investigation were greater than those reported during the 2008 SLR investigation. Evidence of hydrocarbon sheen was noted at three monitoring well locations within the shallow overburden (MW12B-15, MW25B-15, MW29C-15) and

LNAPL was measured at MW28D-15 at 91 cm (GHD, 2015). Though noted to not be from monitoring wells, higher concentrations, up to 900,000 µg/L of F2 PHCs, were found at water samples collected from test pits which were excavated at select locations to investigate and further characterize the LNAPL observed. All these noted locations are within the former Imperial Oil Lands, where the greatest concentrations were expected based on historical operations and sampling.

The remaining locations from the current investigation with concentration exceeding the Tables 3 and 9 Standards were situated east of the Don Roadway, in the Villiers Street Area, and a few locations west of Cherry Street. Aside from the Villiers Street properties, the PHC concentrations in these areas were generally 1 to 2 times the order of magnitude less than those seen in the former Imperial Oil Lands. . Other areas west of Cherry Street and east of the Don Roadway were found at lesser concentrations, with some areas less than both MOECC Standards.

In areas outside of the GHD study area, or areas that the current GHD investigation provided low groundwater sampling density, historical groundwater sampling results were reviewed which indicated high concentrations of PHCs in some areas: F1 PHCs were reported with concentrations in 2005 being measured up to 103,000 µg/L at 165 Villiers Street (with the majority attributable to BTEX concentrations), up to 76,000 µg/L of F2 and 120,000 µg/L of F3 PHCs at MTE MW7-08 in 2008 on the 309 Cherry Street property (no report was available, but results were included in the database from WT). High concentrations of F2 and F3 PHCs have also been found north of the Keating Channel at 480 Lake Shore Boulevard at GOLDER BH12 (22,000 µg/L and 12,000 µg/L, respectively). Historical samples within the former Imperial Oil Lands (SLR locations) reported high concentrations as well which were seen during the current investigation.

VOCs detected at concentrations exceeding the Tables 3 and 9 Standards during the 2015 sampling event were found at seven of approximately 30 analyzed locations. Vinyl chloride exceeded the Tables 3 and 9 Standards in MW9B-15 with a concentration of 0.61 µg/L. MW20B-15 reported BTEX concentrations up to 6,510 µg/L (xylenes) and some chlorinated VOCs up to 23.9 µg/L (cis-1,2-dichloroethylene [DCE]). The chlorinated VOCs at these two locations are likely unrelated, as they are located on separate ends of the Port Lands. MW28D-15 and MW29C-15, located in the former Imperial Oil Lands reported concentrations of benzene up to 374 µg/L, and ethylbenzene was additionally found at MW29C-15 with concentrations of 3,000 µg/L. MW29C-15 and MW12B-15 reported concentrations of n-hexane above the Tables 3 and 9 Standards, up to 86 µg/L. These locations as well as MW40C-15 and MW40D-15 had reported MDLs exceeding the Tables 3 and 9 Standards.

Historical sampling for VOCs indicate high concentrations of BTEX on the 309 Cherry Street property up to 3,000 µg/L (benzene) and some exceedances of vinyl chloride (2.9 µg/L) and cis-1,2-dichloropropene (6.5 µg/L) in 2008. Benzene above the Tables 3 and 9 Standards were also detected in 16 of the SLR locations, mainly located in the former Imperial Oil Lands, and a few other locations across the Study Area. Other VOCs above Tables 3 and 9 Standards are noted to be in these locations, however many may be MDL value exceedances[1]. In the Villiers Street site, BTEX concentrations of up to 46,300 µg/L (toluene) and chlorinated VOC concentrations of up to 9,700 µg/L (cis-1,2-DCE) have been detected in the past in 2005 at CH2MHILL BH-168. Chlorinated VOCs have also been reported at Terrapex MW101, located at the north end of the Study Area, with concentrations of up to 321 µg/L (trans-1,2-DCE). VOC exceedances are shown on Figure 14B.

PAHs were generally detected in low concentrations (less than 4 µg/g) at most sampling locations exceeding the Tables 3 and 9 Standards for the 2015 sampling event, with the exception of a two locations (MW28D-15 and MW29C-15) within the former Imperial Oil Lands exhibiting concentrations up

[1] SLR data in the database do not have any associated qualifiers, which indicate that they may have been omitted from all samples.

to 14,400 µg/L (methylnaphthalenes). All other PAH exceedances at these locations ranged from approximately 10 µg/L to 191 µg/L. Locations exceeding the Standards are shown on Figure 14C.

The low detected concentrations of PAHs present in most of the collected samples across the Study Area, possibly indicate the presence of a widespread PAH issue; however, based on the nature of PAHs and their tendency to sorb to soils, the concentrations may not be groundwater-related and may be due to entrained sediment in the water samples, which tend to bias the PAH results high. CH2M understands that during the current GHD investigation, groundwater monitoring wells were purged using inertia techniques and dedicated Waterra tubing equipped with a foot valve. For future sampling events, if site conditions and time permit, consideration may be given to using low-flow sampling techniques and equipment and in particular for PAH and other organic based parameters to assess if the current results are indicative of current conditions or potentially associated with suspended particulate in the samples.

Historical PAH exceedances were mostly low to moderate concentrations, with the exception of a few locations: MTE MW7-08 exhibited PAH concentrations up to 2,100 µg/L as well as DCS BH-132 in the Villiers Street area with PAH concentrations up to 8700 µg/L.

Historical exceedances of inorganics included mercury in 2005 at 12 locations on the Villiers Street property, with concentrations of up to 17.2 µg/L; and mercury, lead, and copper in 2008 on the 309 Cherry Street property, with concentrations up to 0.87µg/L, 1,140 µg/L and 138 µg/L, respectively. Three locations just south of the Keating Channel and north of Villiers Street reported exceedances of cobalt, chloride, and mercury with concentrations of 60 µg/L, 2,500,000 µg/L and 1.5 µg/L, respectively. At the north end of the study area, Terrapex MW 101 reported exceedances of cadmium and silver. Mercury and cyanide were also reported exceeding within the former Imperial Oil Lands. These findings were not reflected in the recent GHD investigation as all reported concentrations of mercury were at or less than the MDL of 0.01 µg/L, cyanide concentrations were all less than the Table 9 Standard, and the locations north of Villiers, at the north end of the study area (by the Terrapex well) and 309 Cherry Street property fell mostly outside of GHD's investigation area to be able to verify reported concentrations. All inorganic exceedances are shown on Figure 14D.

PCBs were not analyzed as part of the GHD investigation, and were generally nondetect in historical sampling, except for 142 µg/L reported in 2004 at Terrapex MW101, located at the north end of the Study Area, significantly exceeding the Tables 3 and 9 Standards. This report was not made available for review; therefore, the result was not able to be confirmed.

ABNs, CPs, and OCPs were not analyzed as part of the GHD investigation and limited parameters sampled during historical investigations did not find detected concentrations exceeding the Tables 3 and 9 Standards.

A.7.2 Intermediate Overburden Groundwater Quality Assessment and Extent of Impact

The intermediate overburden groundwater quality was assessed using monitoring wells installed approximately at 7 mbgs, and used the most recent groundwater quality from the GHD 2015 Port Lands Investigation (GHD, 2015; 2016) was used as an indicator of current conditions, with historical data noted for supporting either gaps in data or confirming extents of impacts.

PHCs were found exceeding the Tables 3 and 9 Standards at approximately half of the 40 locations analyzed. Maximum concentrations found across the Site were all from one location, MW28B-15 located in the former Imperial Oil Lands, which had concentrations of 9170 µg/L for F1, 12,000,000 µg/L for F2, 13,000,000 µg/L for F3, and 1,110,000 µg/L for F4. Exceedances of PHCs generally occurred within this intermediate zone within the Imperial Oil Lands, with a few locations outside this area. Evidence of hydrocarbon sheen was noted at five locations within the intermediate overburden (MW13-15, MW15-15, MW18A-15, MW23B-15, MW41-15) and LNAPL was measured at MW28B-15 at 75 cm and

MW28C-15 at 15 cm (GHD, 2015). Additionally evidence of DNAPL was reported at MW28C-15, but did not accumulate to a measurable thickness (GHD, 2015).

Historical PHC exceedances were found in the Villiers Street area, with concentrations up to 44,200 µg/L for F1, 15,000 µg/L for F2, 4,000 µg/L for F3 and 760 µg/L for F4. PHC exceedances are shown on Figure 14E.

VOCs reported at concentrations exceeding the Tables 3 and 9 Standards from the 2015 sampling event included 13 locations. High benzene and ethylbenzene concentrations were found within the former Imperial Oil Lands at up to 1880 µg/L and 3,250 µg/L, respectively. A number of MDLs exceeded the Tables 3 and 9 Standards. Other VOC concentrations detected were MW9A-15, which reported concentrations of chlorinated VOCs up to 522 µg/L (vinyl chloride), and MW20A-15, which reported vinyl chloride at 2.05 µg/L.

Historical VOC exceedances include a number of MDL exceedances, however detected parameters include BTEX parameters at CH2MHILL BH-166D (Villiers Street property) up to 18,900 µg/L. VOCs exceedances are shown on Figure 14F.

PAH exceedances reported in the intermediate zone of the overburden appeared to be more significant than that found in the shallower wells. Twelve locations exhibited concentrations above the Tables 3 and 9 Standards, mostly located in the former Imperial Oil Lands; two locations at 85 Commissioners and two locations west of Cherry Street only exhibited low concentrations of exceedances. Concentrations of methylnaphthalenes were the highest at 69,100 µg/L at MW28B-15.

Historical PAH exceedances were limited to two locations; one being low concentrations at CH2MHILL BH-149D and the second with a MDL exceeding the Tables 3 and 9 Standard for naphthalene (1,900 U[2] µg/L). PAH exceedances are shown on Figure 14G.

Groundwater inorganic exceedances of the Tables 3 and 9 Standards were limited to one location in the intermediate overburden, MW9A-15, with a concentration of chloride reported at 2,550,000 µg/L. The other inorganic concentrations were less than the Tables 3 and 9 Standards during the 2015 GHD investigation (GHD, 2015 and 2016). Historical exceedances of inorganics included mercury at two locations in the Villiers Street property (CH2MHILL BH-149D and CH2MHILL BH-166D) with concentrations at a maximum of 8.39 µg/L. Inorganic exceedances are shown on Figure 14H. PCBs were analyzed in one location only in 2014 (130 Commissioners), which resulted in a nondetect concentration.

ABNs, CPs, and OCPs were not analyzed as part of the GHD investigation and limited parameters sampled during historical investigations only included a few semivolatile parameters that did not report detected concentrations exceeding the Tables 3 and 9 Standards.

A.7.3 Deep Overburden Groundwater Quality Assessment and Extent of Impact

For analyzing the groundwater quality of the deep overburden, groundwater data that were collected from 15 monitoring wells installed at approximately 10 mbgs were collectively assessed and summarized. The most recent groundwater quality from the GHD 2015 Port Lands investigation (GHD, 2015 and 2016) was used as an indicator of current conditions. No historical data was available at this depth for supplementing the 2015 investigation.

PHCs were found exceeding Tables 3 and 9 Standards at six locations: three within the former Imperial Oil Lands with concentrations up to approximately 4,000 µg/L (F2 PHCs at MW29A-15); one north of Lakeshore with concentrations up to approximately 3,000 µg/L (F2 PHCs at MW22-15); one location west of Cherry Street with concentrations of 2,360 µg/L (F3 PHCs at MW37B-15); and at 101 Commissioners Street with concentrations under 1,000 µg/L. The locations are shown on Figure 14I.

[2] Parameter was not detected above the associated value (laboratory method detection limit).

Evidence of hydrocarbon sheen was noted at two locations within the deep overburden (MW27B-15 and MW37B-15.

VOCs detected at concentrations exceeding the Tables 3 and 9 Standards were limited to two locations (shown on Figure 14J) within the former Imperial Oil Lands, for benzene, which was reported at concentrations of up to 141 µg/L at MW29A-15.

Concentrations of PAHs reported above the Tables 3 and 9 Standards were present at five locations within the deep overburden groundwater (shown on Figure 14K). The locations were MW22-15, from north of Lakeshore Boulevard, MW27B-15 and MW37B-15 west of Cherry Street, and MW29A-15 in the former Imperial Oil Lands. Concentrations were found up to 74 µg/L.

Inorganic parameters were found at concentrations less than the Tables 3 and 9 Standards for the 2015 sampling event at the 15 locations analyzed.

A.7.4 Bedrock Aquifer Groundwater Quality Assessment and Extent of Impact

Twelve bedrock monitoring wells were installed as part of the GHD 2015 Port Lands investigations (GHD, 2015) and each location was sampled for PHCs, VOCs, PAHs, and inorganics. The exception was MW37A-15, which was reported to be damaged following installation and could not be sampled. Results from the groundwater sampling are summarized in the following paragraphs.

PHCs were not detected above the MDLs, and were less than the Tables 3 and 9 Standards at all locations.

VOCs were not detected above the MDLs, apart from toluene at a concentration of 1.2 µg/L at MW30A-15. Results were less than the Tables 3 and 9 Standards at each location.

PAHs were not detected above the MDLs in most locations; trace concentrations of a few PAHs (methylnaphthalenes, acenaphthene and phenanthrene) were detected at six locations. The results were less than the Table 3 and Table 9 Standards.

Inorganics that were detected exceeding the Tables 3 and 9 Standards included chloride and sodium at MW30-15, MW31-15, MW33A-15 and MW34-15 and barium at MW34A-15. The maximum concentrations detected were 14,000,000 µg/L for chloride; 7,330,000 µg/L for sodium; and 42,300 µg/L for barium. Based on experience at other sites within the area, it is anticipated that the higher barium, sodium, and chloride concentrations are likely naturally occurring. The MDL for silver exceeded the Tables 3 and 9 Standards in three samples (MW30A-15 and the parent and field duplicate sample at MW34A-15). The other concentrations at the bedrock monitoring well locations were less than the Tables 3 and 9 Standards. Exceedances are shown on Figure 14L.

A.7.5 Contaminants of Concern in Groundwater

COCs were identified for the groundwater based on the 2015 GHD investigation and chemicals with concentrations exceeding the Table 9 Standards or chemicals with no applicable Table 9 Standards associated with a PCA. The MOECC Procedures Document (MOE, 2005) indicates that at the discretion of the QPESA, chemicals without an applicable SCS may be included or excluded as COCs based on an understanding of geoscience, the potential for the chemical to limit the use of the site, or both.

As noted with soil in Section A.6.5, a number of additional screening considerations were built into determining COCs for the Study Area, and the following was considered for the groundwater data:

- Analytical results for isomers of some parameters were sometimes reported as isomers only; therefore, the data were reviewed to confirm the summation of these results compared to the Table 9 Standards and the overall parameter were correctly included or excluded (as appropriate) as a COC. For the groundwater, all isomers were checked and were confirmed to be included in an overall parameter and therefore this additional screening did not apply.

- The evaluation of PHC F1, F2, and F3 accounted for both data reported with and without BTEX, naphthalene, and PAHs, respectively, as well as historical data that reported only bulk PHC F1, F2 and F3 results. For conservatism, the greatest reported PHC fraction concentration was applied to screen each fraction, regardless of whether naphthalene or PAH data were included in the result (that is, the greater concentration between PHC F1 or PHC F1 [minus BTEX], PHC F2 or PHC F2 [minus naphthalene], and PHC F3 or PHC F3 [minus PAH]).
- The evaluation of PHC F4 in soil considered analytical results for F4G-SG. Laboratories analyze and report an F4G value in case the chromatogram tracing does not return to the baseline at or before the C50 carbon range. The greatest reported PHC F4 concentration was applied in accordance with CCME guidance (2008), which indicates the greater of the F4 and F4G value should be reported as the PHC F4 value.
- As only the 2015 data was used for screening groundwater, naturally-occurring elements and minerals with no applicable MOECC Standards (MOE, 2005) were not included as part of the investigations and therefore additional screening was not required.
- Chemicals with no applicable MOECC SCS were not analyzed in the groundwater as part of the 2015 investigation; therefore, additional screening for this data was required.

Chemicals detected at concentrations in groundwater greater than the Table 9 Standards include the following:

- Metals and Inorganics
  - Barium (Ba)-Dissolved
  - Chloride (Cl)
  - Sodium (Na)-Dissolved
- PHCs
  - PHC F1 (C6-C10)
  - PHC F2 (C10-C16)
  - PHC F3 (C16-C34)
  - PHC F4 (C34-C50)
- VOCs
  - Benzene
  - cis-1,2-Dichloroethene
  - Ethylbenzene
  - n-Hexane
  - trans-1,2-Dichloroethene
  - Vinyl Chloride
  - Xylenes, total
- PAHs
  - 1+2-Methylnaphthalenes
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Dibenzo(a,h)anthracene
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-Cd)Pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

Chemicals not detected at concentrations greater than the Table 9 Standards in groundwater, but with MDLs greater than the Table 9 Standards, include the following:

- Metals and Inorganics
  - Silver (Ag)-Dissolved
- VOCs
  - 1,1,1,2-Tetrachloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethene
  - 1,2-Dibromoethane
  - 1,2-Dichloroethane
  - 1,3-Dichloropropene
  - 1,4-Dichlorobenzene
  - Bromomethane
  - Carbon tetrachloride
  - Chloroform
  - Tetrachloroethene
  - Trichloroethylene

Table A11 presents a summary of the chemicals retained as COCs in groundwater based on the evaluation provided.

A.8 Soil and Groundwater Quality within the Proposed River Valley

As part of preparing for the future use of the Port Lands, the sequenced construction areas (Phases) of the earthworks activities (see Earthworks Methodology [Tab H]) were overlaid on the soil and groundwater quality figures (Figures 15A through 15I). This is done to give an approximate estimate of the environmental condition of the soil and groundwater in each of the four Phases of the River Valley excavation. Table A12 and A13 provide a breakdown of the exceedances of the soil and groundwater compared to the Tables 3 and 9 Standards, and the S-GW3 component value exceedances for soil concentrations.

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Tables

Table A1. Potentially Contaminating Activities within the Study Area

Port Lands, Toronto, ON

Potentially Contaminating Activity (PCA)[a]	PCA Unique ID	Descriptions of PCAs	Location of PCA[b]		Contaminants of Potential Concern (based on AP method groups[c])	Media Potentially Impacted (groundwater and/or soil)	PCA Results in APEC	Resulting APEC	Rationale	Information Source	HER Reference (as applicable)	FIP Reference (as applicable)
28 - Gasoline and Associated Products Storage in Fixed Tanks	1	AST - A fuel oil AST was located within the warehouse building at 54 Commissioners Street. Golder (2014) observed that the AST did not have secondary containment and that localized staining of the floor was observed in the vicinity of the AST.	54 Commissioners Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-001	PCA within Study Area	HER	CH2M, 2007; Golder, 2014	-
32 - Iron and Steel Manufacturing and Processing 33 - Metal Treatment, Coating, Plating and Finishing 34 - Metal Fabrication	2	Former Foundry and Former Steel Machine Shop - A former foundry was reported to have been located on 309 Cherry Street from 1912 to 1917, and a former steel machine shop from 1928 to 1935. Heavy metals found in soils from previous investigations.	309 Cherry Street	Onsite	VOCs, PAHs, PHCs, complete metals and inorganics, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-002	PCA within Study Area	HER	SLR, 2009	-
32 - Iron and Steel Manufacturing and Processing 33 - Metal Treatment, Coating, Plating and Finishing 34 - Metal Fabrication	3	Machine Shop and Foundry - The Queen's Foundry and later the Bond Engineering Works operated at 16 Munition Street from approximately 1917 to the 1970s. Historical reports indicate metal exceedances to 1.0 mbgs.	10 to 16 Munition Street	Onsite	VOCs, PAHs, PHCs, complete metals and inorganics, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-003	PCA within Study Area	HER	CH2M, 2007; Golder, 2014	-
32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication	4	Former Steel Fabrication, Metal Working and Shop - Structural Steel Fabrication (1920s to 1950s) and Metal Working and Shop Repair (1960s to 1980s). Impacts reported from historical reports to a depth of 1.5 mbgs (PHCs, PAHs, EC).	80 Commissioners Street	Onsite	Metals, PAHs, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-004	PCA within Study Area	HER	CH2M, 2007; DCS, 2002b	-
32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication	5	Former Steel Plant - British Forgings/Baldwin Steel Plant operated at this property from approximately 1914 to 1928.	21-51 and 63, 75, 85, 95, 99, 99a Commissioners Street, 181 to 185 Cherry Street	Onsite	Metals, PAHs, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-005	PCA within Study Area	HER	CH2M, 2007; SLR, 2009	-
NA	6	Former Coal Storage - McColl Bros. Ltd./McColl Frontenac/Texaco developed land on the east side of Cherry Street and used 222 Cherry Street for coal storage (late 1940s to early 1950s).	222 Cherry Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-006	PCA within Study Area	HER	DCS, 2002	-
55- Transformer Manufacturing, Processing and Use	7	Former Transformer Use - Presence of a row of four transformers shown on a 1973 FIP along the exterior of the east building wall.	222 Cherry Street	Onsite	PHCs, PCBs, VOCs	Soil and Groundwater	YES	APEC-007	PCA within Study Area	HER	DCS, 2002	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	8	Former UST - Presence of a UST shown on a 1973 FIP at the extreme southwestern corner of the building, located beneath the loading dock extension.	222 Cherry Street	Onsite	PHCs, VOCs, metals	Soil and Groundwater	YES	APEC-008	PCA within Study Area	HER	DCS, 2002	-
NA	9	Salt Usage - Site was used as a grocery store from 1973 to 2000 with a large portion of the Site dedicated to parking where salt application for de-icing was conducted.	222 Cherry Street	Onsite	Inorganics (EC, SAR)	Soil and Groundwater	YES	APEC-009	PCA within Study Area	HER	DCS, 2002	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	10	Fuel Oil Spill - EcoLog ERIS reports a fuel oil spill of unknown quantity from a UST located at 54 Polson Street in April 1993.	54 Polson Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-010	PCA within Study Area	HER	DCS, 2002	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	11	Oil Spill - EcoLog ERIS reports a catch basin at 63 Polson Street which was overflowing with oil and migrated to Polson Street in May 2000.	63 Polson Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-011	PCA within Study Area	HER	DCS, 2002	-
12 - Concrete, Cement and Lime Manufacturing	12	Cement Plant - Based on City Directories, Canada Cement Company/LaFarge Canada has operated at 54 Polsen Street (formerly Carton Street) since the early 1940s.	54 Polson Street	Onsite	pH	Soil and Groundwater	YES	APEC-012	PCA within Study Area	HER	DCS, 2002	-
NA	13	Former Coal Storage - City Directories list various coal companies at 190 Cherry Street between 1940 and 1951.	190 Cherry Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-013	PCA within Study Area	HER	DCS, 2002	-
NA	14	Former Coal Storage - 1953 FIP shows coal stockpiled on the western half of 20 Polson Street (Toronto Fuels Ltd.).	20 Polson Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-014	PCA within Study Area	HER	DCS, 2002	-
NA	15	Former Coal Storage - 1951 FIP shows coal stockpiles across 176 Cherry Street (Toronto Fuels Ltd. and Ontario Dock & Forwarding Co. Ltd).	176 Cherry Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-015	PCA within Study Area	HER	DCS, 2002	-
30 - Importation of Fill Material of Unknown Quality	16	Imported Fill - Borehole logs for 20 Polson Street indicate the presence of fill materials .	20 Polson Street	Onsite	Metals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-016	PCA within Study Area	HER	SPL, 1997	-
30 - Importation of Fill Material of Unknown Quality	17	Imported Fill - Borehole logs for 222 Cherry Street indicate the presence of fill materials.	222 Cherry Street	Onsite	Metals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-017	PCA within Study Area	HER	DCS, 2003	-
46 - Rail Yards, Tracks and Spurs	18	Former Rail Spurs - 1973 and 1976 FIPs shows a rail spur entering 222 Cherry Street in the northwestern corner and running the length of the western property boundary to the southern wall of the building; 1976 FIP shows a rail spur entering 20 Polson Street from the centre of the eastern property boundary and running through the centre of the property before terminating on Polson Street near the southwestern corner of the property; 1951, 1973, and 1976 FIPs shows rail spurs entering the 176 Cherry Street near the northeastern corner of the property. One set runs through to the centre of the property, while another creates a large oval and links back to the northeastern corner. 1951, 1973, and 1976 FIPs shows rail spurs running in a east-west direction along almost the entire length of Polson Street, terminating at Lake Ontario. 1951, 1973 and 1976 FIPs shows rail spurs entering 54 Polson Street in the northeastern corner with one spur running towards the southern boundary (1951 only) and additional spurs running through the centre of the property terminating near the western property boundary.	176, 222 Cherry Street; 1-63 Polson Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-018	PCA within Study Area	HER	DCS, 2002	-
55- Transformer Manufacturing, Processing and Use	19	Former Transformer Use - 1973 FIP shows a transformer located on the south side of a cluster of four concrete silos on 54 Polson Street, adjacent to Polson Street.	54 Polson Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-019	PCA within Study Area	HER	DCS, 2002	-
32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication 49 - Salvage Yard, including automobile wrecking	20	Scrap Metal Handling/Fabrication - 1973 FIP shows a scrap metal yard. City Directories list Warehouse Metals/Industrial Metal Co. of Canada between the years 1961 and 1982.	176 Cherry Street	Onsite	PCBs, VOCs, PAHs, PHCs, metals, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-020	PCA within Study Area	HER	DCS, 2002	-
34 - Metal Fabrication	21	Former Can Company - 1976 FIP shows the Continental Can Company of Canada Limited located on the south side of Polson Street.	1 - 63 Polson Street	Onsite	Metals	Soil and Groundwater	YES	APEC-021	PCA within Study Area	HER	DCS, 2002	-
45 - Pulp, Paper and Paperboard Manufacturing and Processing	22	Former Paperboard Manufacturing - 1935 and 1951 FIPs show Dominion Boxboards Limited (1935) and Gair Co. Canada Limited (1951) located on the south side of Polson Street.	1 - 63 Polson Street	Onsite	Metals/inorganics	Soil and Groundwater	YES	APEC-022	PCA within Study Area	HER	DCS, 2002	-
11 - Commercial Trucking and Container Terminals 28 - Gasoline and Associated Products Storage in Fixed Tanks	23	Vehicle Storage Area - Golder (2013) indicates that the western portion of 312 Cherry Street was historically used for intermittent storage of vehicles and tractor trailers (1970s to 1990s). An AST was reportedly used for refuelling activities.	312 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals (lead)	Soil and Groundwater	YES	APEC-023	PCA within Study Area	HER	Golder, 2013	-
46 - Rail Yards, Tracks and Spurs	24	Former Rail Spurs - Golder (2013) indicates that a railway line was located to the east of 312 Cherry Street and that spurs extended onto the property.	312 Cherry Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-024	PCA within Study Area	HER	Golder, 2013	-
55- Transformer Manufacturing, Processing and Use	25	Transformer Use - Golder (2013) reports the presence of a pad-mounted transformer (1,817 L) located north of the office building at 312 Cherry Street. A 2004 inspection report reviewed by Golder indicated the transformer oil PCB concentration is approximately 27 ppm .	312 Cherry Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-025	PCA within Study Area	HER	Golder, 2013	-
44 - Port Activities, including Operation and Maintenance of Wharves and Docks	26	Ship Docking Areas - Golder (2013) reports that docking areas on the north, west, and south sides of 312 Cherry Street may have been used by Century Coal for the storage and transfer of coal. SLR (2009) reports that the property was used as a foundry yard and ship dockage from 1912 to 1917.	312 Cherry Street	Onsite	PHCs, metals, PAHs, phenols (ABNs) (if foundry sand)	Soil and Groundwater	YES	APEC-026	PCA within Study Area	HER	Golder, 2013; SLR, 2009	-
46 - Rail Yards, Tracks and Spurs	27	Former Rail Spurs - ran from the west between Villiers and Commissioners Streets to the northeast corner of 165 Villiers (Golder, 1992a). The property at 10 Munition Street has been historically used for a railway right of way to access 309 Cherry Street (CH2M, 2008b). FIPs from 1935 and 1951 show a rail spur entering the property at 16 Munition Street from the north and running along the west side of the building (Golder, 2013). 1935 FIP shows a rail spur entering 54 Commissioners along the centre of the northern property boundary and terminating at the rear of the building; 1935 FIP shows a rail spur entering 54 Commissioners along the centre of the northern property boundary and terminating at the rear of the building(Golder, 2013; Golder, 2014). FIPs from 1935 and 1951 show a rail spur entering the property at 2 Villiers Street from the southeast corner (Golder, 2013).	Between Commissioners and Villiers Streets	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-027	PCA within Study Area	HER	Golder, 1992a	-

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28 - Gasoline and Associated Products Storage in Fixed Tanks 51 - Solvent Manufacturing, Processing and Bulk Storage 58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	28	Solvent Recovery Operations - Anachemicia Chemicals, a solvent recovery company, had an oil fired boiler house, and four storage tanks located between the rail spurs on 165 Villiers Street. Waste products were received in 45 gallon drums and typically included mineral spirits, Shellsol and Varsol.	165 Villiers Street	Onsite	VOCs, PHCs, PAHs, PCBs, metals	Soil and Groundwater	YES	APEC-028	PCA within Study Area	HER	Golder, 1992a	-
NA	29	Grease Building - an "open grease building" was indicated along the rail spur on a 1955 site plan for Fielding Chemicals Limited. The DCS report (2006a) indicated that a previous Golder report noted the building to be present from 1954 to 1966.	150 Commissioners / along Rail Spur	Onsite	VOCs, BTEX, PHCs	Soil and Groundwater	YES	APEC-029	PCA within Study Area	HER	Golder, 1992a	-
NA	30	Former Coal Storage - Anthracite Briquette Company manufactured coal briquettes on 150 Commissioners Street beginning in 1919, and a coal shed was indicated on the southern portion of the property.	150 Commissioners	Onsite	PAHs, metals	Soil and Groundwater	YES	APEC-030	PCA within Study Area	HER	Golder, 1992a	-
30 - Importation of Fill Material of Unknown Quality	31	Imported Fill - Land reclamation occurred in the area in approximately 1913 to 1917. Material was dredged from the east end of the Toronto Harbour into the Ashbridges Bay area.	Study Area south of Keating Channel	Onsite	Metals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-031	PCA within Study Area	HER	Golder, 1992a	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	32	Potential USTs - Two diesel USTs located east of the former building on 105 Villiers street identified in the Phase II ESA by Golder (1992). An area of 1,200 cubic meters was estimated to be impacted. The diesel tanks were removed from the site in November 1996. Strong odours were present in the soils surrounding the tanks but no evidence of visible product and no soils were removed. Verification samples (6) were below Table B industrial/commercial criteria.	105 Villiers	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-032	PCA within Study Area	HER	Golder, 1992b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	33	Potential USTs and AST - Four USTs were identified: two gasoline USTs in the west end of the 105 Villiers courtyard, and two fuel oil USTs on the east side of the 105 Villiers building (one within the building footprint and one just outside). The UST outside the east side had an estimated capacity of 250 gallon, the other UST sizes are unknown. One fuel oil AST was identified in the southeast corner of the 105 Villiers courtyard; size of the tank is 1000 gallons. Investigations conducted by Adamas and DCS have indicated the soil in the area of these tanks have been impacted with PHCs and BTEX due to filling operations and/or leaks from tanks. Geophysical surveys conducted by DCS (1997) could not confirm the presence of the USTs in the west end of the courtyard. The two USTs on the east side of 105 Villiers building were removed in December 1996. No evidence of grossly contaminated soils were observed; verification soil samples (9) were below Table B industrial/commercial criteria and the excavation was backfilled.	105 Villiers	Onsite	PHCs, BTEX, metals (lead)	Soil and Groundwater	YES	APEC-033	PCA within Study Area	HER	Adamas, 1995	-
7 - Boat Manufacturing	34	Ship Repairs - Two ship repair companies listed in City Directories for the years 1960 to 1976. DCS (2002b) indicated that these operations were conducted out of the buildings located on the southern property boundary of 80 Commissioners Street.	80 Commissioners Street	Onsite	Metals, PHCs, VOCs	Soil and Groundwater	YES	APEC-034	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	35	UST - An unused UST was located north of the building located in the southwestern corner of 80 Commissioners Street. DSC (2002b) measured product within the tank and estimated it's capacity as less than 4,500-L.	80 Commissioners Street	Onsite	PHCs, VOCs, metals (lead)	Soil and Groundwater	YES	APEC-035	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	36	Potential USTs, Oil/Water Separator - three potential fuel oil USTs were identified on the east side of the building at 105 Villiers Street; two USTs were 240 gallons and the third was 2000 gallons. Geophysical surveys conducted by DCS (1997) could not confirm the presence of these USTs, and investigations uncovered an oil water separator in the vicinity. The oil/water separator was removed November 1996, and a small amount of grossly contaminated soils were excavated (no volume indicated). 5 Verification samples were below Table B industrial/commercial criteria and the excavation was backfilled.	105 Villiers	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-036	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	37	Former UST - a 2000 gallon fuel oil UST was identified on the west side of the building at 155 Villiers Street; the UST was removed in December 1996 and the tank was noted to be rusted with perforations. Free product was observed on the groundwater infiltrating into the excavation, and grossly contaminated soil was excavated for disposal (volume not indicated). An extraction well was installed in June 1997.	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-037	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	38	Former UST - a 2000 gallon fuel oil UST was identified on the north side of the building at 150 Commissioners Street; the UST was removed in November 1996 and the tank was noted to be rusted with perforations. No evidence of grossly contaminated soils were observed; verification soil samples (3) were below Table B industrial/commercial criteria and the excavation was backfilled.	150 Commissioners	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-038	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	39	Former UST - a 1000 gallon "dirty Varsol" UST was reported located on the north end of the building at 155 Villiers Street. The UST was removed in November 1996 and very strong solvent odours were present in the soils surrounding the tank including a visible sheen. The sidewalls of the excavation were advanced until the sheen was no longer observed. An approximate 80 m^2 area was excavated to a depth ranging from 2.5 to 2.7 mbgs. Seven verification soil samples were collected, two samples (on the north and west wall at 1.5 mbgs) indicated xylene concentrations above Table B industrial/commercial criteria with concentrations of 150 ppm and 128 ppm.	155 Villiers Street	Onsite	BTEX, PHCs, VOCs	Soil and Groundwater	YES	APEC-039	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	40	Potential USTs - one fuel oil UST was identified within the building footprint at 155 Villiers, size of tank is unknown, Geophysical surveys conducted by DCS (1997) were not able to confirm the location/presence.	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-040	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	41	Former AST - two fuel oil ASTs were identified south of the building at 155 Villiers Street. Tanks had a capacity of 500 gallons.	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-041	PCA within Study Area	HER	Adamas, 1995	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	42	Former UST - a 1000 gallon fuel oil UST was removed in November 1996. No grossly contaminated soils were observed; verification soil samples (4) were below Table B industrial/commercial criteria and the excavation was backfilled.	165 Villiers Street	Onsite	BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-042	PCA within Study Area	HER	Adamas, 1995	-
NA	43	Chemical Storage - Fielding & Sons (Later Fielding Chemicals Limited - Naval Stores and Heavy Chemicals) were brokers and dealers of a variety of products including spirits of turpentine and glues to soap powder and poultry netting. They occupied the property at 165 Villiers from approximately 1919 to approximately 1964.	165 Villiers Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-043	PCA within Study Area	HER	Adamas, 1995	-
NA	44	Smith Transport Warehousing - The Adamas report indicated the building on 150 Commissioners to be used for offices and sheds to support the transport business from 1935, but added warehousing in 1939 on the eastern end.	105 Villiers	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-044	PCA within Study Area	HER	Adamas, 1995	-
NA	45	Smith Transport Trailer Repair Shop - Smith Transport was a transport business; the building on the 155-165 Villiers property was built sometime after 1964 for the repair of trailers.	155-165 Villiers Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-045	PCA within Study Area	HER	Adamas, 1995	-
NA	46	Smith Transport Warehousing - The Adamas report indicated the building on 150 Commissioners to be used for warehousing. Smith Transport occupied this site from approximately 1949, and initially used it for temporary truck parking.	150 Commissioners	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-046	PCA within Study Area	HER	Adamas, 1995	-
18 - Electricity Generation, Transformation and Power Stations	47	Electrical Substation - Toronto Hydro operated an electrical substation at 281 Cherry Street from the 1920s to approximately 1995.	281 Cherry Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-047	PCA within Study Area	HER	OHE, 2011; CH2M, 2008	-
55 - Transformer Manufacturing, Processing and Use	48	Former Transformer Use - CH2M (2008) and OHE (2011) reports that up to two transformers were formerly located in the southeast corner of the building at 281 Cherry Street.	281 Cherry Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-048	PCA within Study Area	HER	OHE, 2011; CH2M, 2008	-

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34 - Metal Fabrication	49	Commercial Refrigeration Manufacturer - Commercial refrigeration equipment has been manufactured, serviced, or both at 65 Villiers Street, from approximately the 1920s to the present. FIPs from 1935 and 1951 show coal storage, a garage, a woodworking building, and a welding room.	65 to 95 Villiers Street	Onsite	metals, PHCs, VOCs, PAHs	Soil and Groundwater	YES	APEC-049	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	50	UST - DCS (2002b) reports the presence of an oil UST within the main building at 65 Villiers Street based on information received from the TSSA.	65 to 95 Villiers Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-050	PCA within Study Area	HER	DCS, 2002b	-
44 - Port Activities, including Operation and Maintenance of Wharves and Docks	51	Port Uses - City Directories indicate that 62 Villiers Street has been used by the Toronto Harbour Commissioners from at least the late 1920s for port uses. Use of this property as a Dry Dock was listed in the City Directories for 1927 only (the first year available for review).	62 Villiers Street	Onsite	PHCs, VOCs, metals, PAHs	Soil and Groundwater	YES	APEC-051	PCA within Study Area	HER	Golder, 2013	-
NA	52	Former Coal Storage - Based on City Directories and FIPs, Milnes Coal Co. operated from 2 Villiers Street from at least 1927 to 1935.	2 Villiers Street	Onsite	PAHs, Metals	Soil and Groundwater	YES	APEC-052	PCA within Study Area	HER	Golder, 2013	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	53	Former Gas Station - EcoLog ERIS reports the presence of a British American Oil Co. Ltd. service station located at 309 Cherry Street which had one 1,514-L gasoline UST and three 3,785-L gasoline USTs in 1934.	309 Cherry Street	Onsite	PHCs, BTEX, metals (lead)	Soil and Groundwater	YES	APEC-053	PCA within Study Area	HER	Golder, 2014	-
28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	54	Former Bulk Fuel Storage - McColl Bros./McColl Frontenac Oil Co. Ltd. at 309 Cherry Street is listed in EcoLog ERIS to have been a petroleum bulk storage site with tanks containing several hundred thousand litres of petroleum and crude oils for the years 1925 and 1930. Bulk fuel storage was conducted at the property from approximately 1938 to the 1990s. SLR (2014) reports that a 1987 Golder report indicates the presence of PHC contaminated at the property to a depth of 4 mbgs. Floating product ranging in thickness between 0.15 and 0.7 m was historically found in monitoring wells located in the centre of the property.	309 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-054	PCA within Study Area	HER	Golder, 2014; SLR, 2009	-
16 - Crude Oil Refining, Processing and Bulk Storage	55	Former Oil Recycling - AquaTech Blue Ltd. operated an oil recycling facility at 309 Cherry Street. The company was fined over $700,000 in August, 2000 for allowing the discharge of PHCs from this property to the Keating Channel. EcoLog ERIS reports that this property has PCB-containing equipment and stores PCBs (1999 and 2000). EcoLog ERIS reports several spills and explosive vapour readings in storm sewers between the years 1994 to 1999, which are associated with AquaTech Blue's use of the property.	309 Cherry Street	Onsite	PHC, BTEX, PAHs, PCBs, VOCs, metals/inorganics	Soil and Groundwater	YES	APEC-055	PCA within Study Area	HER	Golder, 2014	-
58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	56	Waste Processing - Quantex Technologies has operated a waste transfer/processing facility at 309 Cherry Street from approximately 1999 to the present. EcoLog ERIS reports several spills for years between 2000 and 2011, which are associated with Quantex's use of the property.	309 Cherry Street	Onsite	PHC, BTEX, PAHs, PCBs, VOCs, metals/inorganics, OC pesticides	Soil and Groundwater	YES	APEC-056	PCA within Study Area	HER	Golder, 2014	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	57	USTs - EcoLog ERIS reports that the Toronto Port Authority operated a private fuel outlet at 62 Villiers Street between 2007 and 2011. The property is listed as having two USTs, one for gasoline and one for diesel (4,500 L each), both installed in 1989.	62 Villiers Street	Onsite	PHCs, BTEX, metals (lead)	Soil and Groundwater	YES	APEC-057	PCA within Study Area	HER	Golder, 2014	-
16 - Crude Oil Refining, Processing and Bulk Storage	58	Oil Storage - SLR (2009) reports that 2 Villiers Street was used for oil storage from approximately 1940 to 1950.	2 Villiers Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-058	PCA within Study Area	HER	SLR, 2009	-
9 - Coal Gasification	59	Coal Gasification Plant - The Consumers Gas Company appears on FIPs from 1913 and 1924, and aerial photographs from 1947 at the southwestern corner of Eastern and Booth Avenues.	Southwestern corner of Eastern and Booth Avenues	Onsite/ Offsite	PHCs, BTEX, PAHs, VOCs, metals	Soil and Groundwater	YES	APEC-059	PCA within Study Area	FIP	-	1913, 1924
28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	60	Bulk Tank Farm - 1913 and 1924 FIP show a bulk tank farm on the north side of the Keating Channel on the east side of Cherry Street. The company name is not labelled in 1913, but is listed as the British North American Oil Company in the 1924 FIP. The structures/tanks associated with this property extend east to the Don River on the 1924 FIP. The tank farm, extending west from Cherry Street, south to the Keating Channel, north to the railway lines, and east to the Don River, is visible on aerial photographs until 1971. A 1983 aerial shows that all of the large ASTs have been removed from this property.	Northeastern corner of Cherry Street and Keating Channel, west to Don River	Onsite/ Offsite	PHCs, VOCs, PAHs, metals	Soil and Groundwater	YES	APEC-060	PCA within Study Area	FIP	-	1913
46 - Rail Yards, Tracks and Spurs	61	Railway Main Lines/Yard - Grand Trunk Railway lines are shown on the 1913 and 1924 FIPs. These railway lines are still in place based on current aerial mapping.	North of Keating Channel, west of Don River	Onsite/ Offsite	VOCs, PAHs, PHCs, metals, OC Pesticides, Chlorophenols	Soil and Groundwater	YES	APEC-061	PCA within Study Area	FIP, AER	-	1913, 1924
32- Iron and Steel Manufacturing and Processing	62	Iron Manufacturing - 1913 and 1924 FIPs show the National Iron Corporation Limited on a parcel of land located at the northwestern corner of Cherry Street on the north side of the Keating Channel, extending west to Parliament Street.	Northwestern corner of Cherry Street and Keating Channel	Onsite/ Offsite	Metals, PAHs, phenols (ABNs) (if foundry sand), PHCs	Soil and Groundwater	YES	APEC-062	PCA within Study Area	FIP, AER	-	1913, 1924
50 - Soap and Detergent Manufacturing, Processing and Bulk Storage	63	Soap Manufacturing - 1903, 1913, and 1924 FIPs shows the Sunlight Soap Works plant. Expansion to the main plant building is evident in the FIPs over the years, as is the construction of additional buildings.	South of Eastern Avenue, west of Don River, north of CNR Rail lines	Offsite	pH, SAR	Soil and Groundwater	YES	APEC-063	PCA upgradient of Study Area	FIP	-	1903, 1913, 1924
NA	64	Former Coal Storage - 1958 FIP indicates that Canada Coal Ltd. occupied 238 Cherry Street.	238 Cherry Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-064	PCA within Study Area	HER	DCS, 2002	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	65	Former USTs/ASTs - EcoLog ERIS report cited in Golder (2013) indicated the presence of a 757-L tank of gasoline from 1919 and 1928 and a 378-L tank of gasoline in 1921 at 256 Cherry Street associated with Century Coal Ltd.	256 Cherry Street	Onsite	PHCs, BTEX, metals (lead)	Soil and Groundwater	YES	APEC-065	PCA within Study Area	HER	Golder, 2013	-
44 - Port Activities, including Operation and Maintenance of Wharves and Docks	66	Former Marine Terminal - According to City Directories, portions of 242 Cherry Street were used as a marine terminal/wharf from approximately 1925 to 1982.	242 Cherry Street	Onsite	PHCs, VOCs, metals, PAHs	Soil and Groundwater	YES	APEC-066	PCA within Study Area	HER	DCS, 2002	-
58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	67	Recycling and Waste Transfer Station - EcoLog ERIS report cited in Golder (2013) indicates that Turtle Island Recycling has several convictions under the Environmental Protection Act, for failure to comply with their Certificate of Approval, including illegal storage of wastes outdoors. The property is currently used as a recycling and waste transfer station operated by GFL Environmental.	242 Cherry Street	Onsite	Metals/inorganics, PAHs, PAHs, VOCs, PCBs, PHCs	Soil and Groundwater	YES	APEC-067	PCA within Study Area	HER	Golder, 2013	-
NA	68	Former Coal Storage - Century Coal occupied 256 and 312 Cherry Street from approximately 1932 to the late 1950s.	256 and 312 Cherry Street	Onsite	Metals, PAHs	Soil and Groundwater	YES	APEC-068	PCA within Study Area	HER	Golder, 2013	-
52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	69	Vehicle Maintenance and Storage - Golder (2014) reports that 54 Commissioners was used for personal vehicle maintenance between approximately 1995 and 2011, with vehicle storage occurring in the southwestern corner and along the western property boundary.	54 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-069	PCA within Study Area	HER	Golder, 2014	-
NA	70	Former Overhead Cranes - Crane runways/travelling cranes are depicted on both sides of the main building at 80 Commissioners on FIPs and City of Toronto drawings from 1941 and 1951. It is unknown whether these cranes were operated with hydraulics or other fuels.	80 Commissioners Street	Onsite	Metals, PHCs	Soil and Groundwater	YES	APEC-070	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	71	Waste Drum Storage and Potential UST - DSC (2002b) reports that they had previously observed an above ground fill pipe (potentially associated with a UST) and approximately 50 drums of used oil and paint sludges "on the northern limit" of the property during a Site visit in 1992.	80 Commissioners Street	Onsite	Metals, PHCs, VOCs	Soil and Groundwater	YES	APEC-071	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	72	ASTs - Two fuel ASTs were located at 80 Commissioners at the time of the DSC (2002b) site visit. One (2,270-L) was located on the exterior wall of the main building (northeast side) contained waste oil and the second (2,270-L) was located inside an area where generators are stored/serviced containing new oil. A third AST containing waste antifreeze (1,820-L) was located west of the exterior waste oil AST.	80 Commissioners Street	Onsite	Metals, PHCs, BTEX, glycols	Soil and Groundwater	YES	APEC-072	PCA within Study Area	HER	DCS, 2002b	-

Table A1. Potentially Contaminating Activities within the Study Area

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28 - Gasoline and Associated Products Storage in Fixed Tanks	73	Former AST - DSC (2002b) reports that based on a review of a 1998 subsurface investigation, an aboveground heating oil storage tank may have historically been located in the southwestern corner of 80 Commissioners. The 1998 study advanced a test pit in this area and encountered hydrocarbon impacts, which were attributed to the oil tank. DSC (2002b) reports that the tank was not present during their site visit in 2002.	80 Commissioners Street	Onsite	PHCs, PHCs, BTEX	Soil and Groundwater	YES	APEC-073	PCA within Study Area	HER	DCS, 2002b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	74	AST - Golder (2014b) reports the presence of a diesel AST (without secondary containment), observed along the eastern property boundary of 130 Commissioners Street.	130 Commissioners Street	Onsite	PAHs, PHCs, BTEX	Soil and Groundwater	YES	APEC-074	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	75	AST - Golder (2014b) reports the presence of a diesel AST (without secondary containment), observed along the southern property boundary of 130 Commissioners Street.	130 Commissioners Street	Onsite	PAHs, PHCs, BTEX	Soil and Groundwater	YES	APEC-075	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	76	ASTs - Golder (2014b) reports the presence of two heating oil ASTs (without secondary containment), observed external to the northeast corner of the office building at 130 Commissioners Street.	130 Commissioners Street	Onsite	PHCs, PHCs, BTEX	Soil and Groundwater	YES	APEC-076	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	77	Potential UST - Golder (2014b) reports that a UST associated with a former pump island may have been located to the west of the Scale House at 130 Commissioners Street based on previous observations made by WESA of a fill port and vent pipe. A Site representative confirmed that gasoline was once dispensed from that area.	130 Commissioners Street	Onsite	PHCs, BTEX, metals (lead)	Soil and Groundwater	YES	APEC-077	PCA within Study Area	HER	Golder, 2014b	-
49 - Salvage Yard, including automobile wrecking 34 - Metal Fabrication	78	Scrap Metal Recycling - The property at 130 Commissioners Street has been used as a scrap metal recycling facility since the 1940s. A smelting furnace was reported to have been used to burn off the coverings and insulation from cables and wires.	130 Commissioners Street	Onsite	Metals and inorganics, VOCs, PHCs, PCBs	Soil and Groundwater	YES	APEC-078	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	79	Former ASTs - Golder (2014b) reports that two fuel oil ASTs were formerly present along the western exterior wall of the warehouse based on a 1979 FIP.	130 Commissioners Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-079	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	80	Former ASTs - Golder (2014b) reports that a fuel oil AST was formerly present within the southwestern corner of the warehouse (washroom/change room addition) based on a 1979 FIP.	130 Commissioners Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-080	PCA within Study Area	HER	Golder, 2014b	-
28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	81	Bulk Tank Farm - A 1947 aerial shows a bulk tank farm on the east side of the mouth of the Don River at the Keating Channel. It is unknown whether these tanks are associated with the British North American Oil Company tank farm located on the west side of the Don River (as shown on the 1924 FIP), or Imperial Oil tank farm located at the Don Roadway and Villiers Street (as shown on a 1951 FIP). The tank farm is not present in an 1950 aerial image, where a factory/plant and associated buildings are now visible. Prior to 1947, this parcel appeared vacant on the 1924 FIP, and as the "Gooderham & Worts cattle sheds" from 1884 to 1913.	21 Don Roadway	Onsite	PHCs, VOCs, PAHs, metals	Soil and Groundwater	YES	APEC-081	PCA within Study Area	FIP, AER	-	1884, 1899, 1903, 1913, 1924
34 - Metal Fabrication	82	Machine Shop - A machine shop is shown on a 1951 FIP associated with the Toronto Dry Dock Company and one associated with the Toronto Harbour Commissioners.	62 Villiers Street	Onsite	Metals, PHCs, VOCs, PAHs	Soil and Groundwater	YES	APEC-082	PCA within Study Area	HER	Terrapex, 2009	-
28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	83	Bulk Tank Farm - 1951 FIP shows five bulk ASTs covering the entire southern portion of 309 Cherry Street.	309 Cherry Street	Onsite	PHCs, VOCs, PAHs, metals	Soil and Groundwater	YES	APEC-083	PCA within Study Area	HER	Terrapex, 2009	-
50 - Soap and Detergent Manufacturing, Processing and Bulk Storage	84	Soap Manufacturing - It was reported that the Unilever Company operated out of a factory at 21 Don Roadway from the 1950s until 2012.	21 Don Roadway	Onsite	pH, SAR	Soil and Groundwater	YES	APEC-084	PCA within Study Area	AER	-	-
46 - Rail Yards, Tracks and Spurs	85	Rail Yard - A rail yard is present in current aerial photographs and those dating back to 1947.	Northeast corner Don River and Lake Shore Boulevard East	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-085	PCA within Study Area	AER	-	-
10 - Commercial Autobody Shops	86	Repair Garage - CRA (2010) reports that the property located at 480 Lake Shore Boulevard East is current used as an automobile repair business.	480 to 520 Lakeshore Boulevard East	Onsite/ Offsite	PHCs, VOCs, metals	Soil and Groundwater	YES	APEC-086	PCA within Study Area	HER	CRA, 2010	-
36 - Oil Production	87	Oil Pipeline - A Trans-Northern Pipeline meter station is located on the east side of the Don Roadway, just north of Lakeshore Boulevard East. The status and route of the pipeline in this area is not known.	Don Roadway, north of Lake Shore Boulevard East	Onsite	PHCs, VOCs, metals, PAHs	Soil and Groundwater	YES	APEC-087	PCA within Study Area	AER	-	-
58-Waste Disposal and Waste Management 30-Importation of Fill Material of Unknown Quality	88	Soil Remediation Facility - Harbour Remediation & Transfer Inc. occupied 97 Commissioners Street from approximately 1994 to present.	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-088	PCA within Study Area	HER	Dames & Moore, 1994	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	89	Former UST - Former UST, diesel pump and vent pipe reported by Dames & Moore (1994) to be present on the east portion of 97 Commissioners Street property, immediately south of the office building. At the time the report was written, the UST had been removed; the fuel pump was still present onsite.	97 Commissioners Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-089	PCA within Study Area	HER	Dames & Moore, 1994	-
58-Waste Disposal and Waste Management	90	Waste and Chemical Product Storage - Dames & Moore (1994) reported nine 500 gallon storage drums grouped together at 97 Commissioners Street. Three drums were rusted and empty; one was full without a label; one was half full and in good condition labelled "Texaco multigrear EP". Rusted metal pipes were stored next to the drums. The location of the drum storage area is unclear as the report text described the area to be on the east side of the property while the appended photo describes the area to be present along the west property boundary. Both areas have been included on the PCA/APEC map.	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-090	PCA within Study Area	HER	Dames & Moore, 1994	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	91	Former ASTs/Storage Silos-Three large storage silos/ASTs were present on the southeast portion of 97 Commissioners Street; one was reported to be used as a water storage tank, the contents of the remaining two ASTs are unknown. Asphalt and concrete secondary containment berms were present around the tanks. All tanks were empty at the time of the D&M investigation.	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-091	PCA within Study Area	HER	Dames & Moore, 1994	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	92	Former ASTs/Storage Silos - Two storage silos/ASTs were present immediately south of the processing building (larger building) on 97 Commissioners Street. The contents of the two ASTs are unknown. Asphalt and concrete secondary containment berms were present around the tanks. All tanks were empty at the time of the D&M investigation.	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-092	PCA within Study Area	HER	Dames & Moore, 1994	-
55-Transformer Manufacturing, Processing and Use	93	Transformer Station - Dames and Moore (1994) reported the presence of a transformer station on the west side of the processing building at 97 Commissioners Street enclosed in a chain-link fence. Aerial photographs from the early 1970s indicated the presence of the transformer station however no date was visible on the outside transformer during the D&M site visit. It was not confirmed whether the transformer contained PCBs.	97 Commissioners Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-093	PCA within Study Area	HER	Dames & Moore, 1994	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	94	Oil Separator - D&M (1994) reported the presence of a two stage oil separator along the north wall of the processing building (larger building). A monitoring well was discovered by D&M in this area which contained Waterra tubing covered in residual diesel oil and water removed from the well had a black oily sheen and strong hydrocarbon odour.	97 Commissioners Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-094	PCA within Study Area	HER	Dames & Moore, 1994	-

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28 - Gasoline and Associated Products Storage in Fixed Tanks	95	Former AST - Dames and Moore (1994) reported the presence of a former AST along the western boundary of 97 Commissioners Street.	97 Commissioners Street	Onsite	VOCs, PAH, PHCs	Soil and Groundwater	YES	APEC-095	PCA within Study Area	HER	Dames & Moore, 1994	-
49-Salvage Yard, including automobile wrecking	96	Rusted scrap metal parts and pile of metal pipes-Dames and Moore (1994) reported an area at the northwest corner of the processing building with a variety of rusted scarp metal parts and a pile of metal pipes.	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs, PCBs	Soil and Groundwater	YES	APEC-096	PCA within Study Area	HER	Dames & Moore, 1994	-
46-Rail Yards, Tracks and Spurs	97	Former Rail Spurs - Figure included in the Dames and Moore (1994) report shows a rail spur entering 97Commissioners along the centre western property boundary and terminating at the middle of the south property boundary. Based on current aerials of the site, the rail spurs no longer appear to be present.	97 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC Pesticides, Chlorophenols	Soil and Groundwater	YES	APEC-097	PCA within Study Area	HER	Dames & Moore, 1994	-
20-Explosives and Ammunition Manufacturing, Production and Bulk Storage	98	Artillery Shell Manufacturing - DSC (2000, 2009) and Golder (1991) reported that the property south of Commissioners Street were used for artillery shell manufacturing by British Forgings Limited during the First World War.	51, 75, 85, 99, 99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-098	PCA within Study Area	HER	DSC, 2000; DCS (2009); Golder, 1991	-
28-Gasoline and Associated Products Storage in Fixed Tanks	99	Bulk Tank Farm - According to DSC (2009) 75 Commissioners (formerly 85 Commissioners before being severed) was used as a bulk fuel storage tank farm by McColl Frontenac from approximately 1949 to 1964.	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-099	PCA within Study Area	HER	DSC, 2009	-
52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	100	Tractor Trailer Parking - Canadian Pacific Express used this 75 Commissioners Street for tractor trailor parking purposes (1964-1988) before it was severed from 85 Commissioners Street (DCS, 2000).	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-100	PCA within Study Area	HER	DSC, 2000	-
58 - Waste Disposal and Waste Management	101	Solid Waste Recycling Operation - DCS (2009) reported that Harkow Recycling and Aggregates operated a waste recycling facility at 75 Commissioners Street (1994-1999). According to Terrapex (2009) 75 Commissioners Street was listed from United Rentals and SP Canadian Film Production Inc. for a variety of wastes such as aromatic and aliphatic solvents, petroleum distillates, light fuels, waste oils & lubricants, crankcase oils, and paint, pigment and coating residues from 2001-2009.	75 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-101	PCA within Study Area	HER	DSC, 2009	-
52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems 11 - Commercial Trucking and Container Terminals	102	Heavy Equipment Rental Company - DCS (2000) reported that United Rentals, a heavy equipment rental company, leased the north portion of the 75 Commissioners Street property from 2000 to present. The portion of the site leased was to be used as an office and equipment yard used for storage maintenance and refuelling purposes.	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-102	PCA within Study Area	HER	DSC, 2000	-
8 - Chemical Manufacturing, Processing and Bulk Storage 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	103	Chemical Storage - DCS (2000) reported the presence of waste materials such as waste oils, hydraulic oils, xylene, gas cylinders, paint, grease in the work bay in the northern portion of the north building present at 75 Commissioners Street during their investigation in 2000. Staining of floor surfaces (oil and grease covered an 120 m^2 area) and product release stains were also noted during DCS (2000) investigation.	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-103	PCA within Study Area	HER	DSC, 2000	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	104	ASTs - Noted in the Terrapex (2009) report the presence of ASTs/jerry can along the eastern boundary of 75 Commissioners.	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-104	PCA within Study Area	HER	Terrapex, 2009	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	105	Tank Farm - DSC (2009) reported that the property at 85 Commissioners Street was used for bulk fuel storage tank farm by McColl Frontenac (1964-1988).	85 Commissioners Street	Onsite	PHC, metals/inorganics, PAHs, VOCs, BTEX	Soil and Groundwater	YES	APEC-105	PCA within Study Area	HER	DSC, 2009	-
52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	106	Truck Storage - DSC (2009) reported that the fuel storage tank farm was removed from the property at 85 Commissioners Street. Both 85 and 95 Commissioners Street were subsequently used for truck storage by Canadian Pacific Express and Transport .	85 and 95 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-106	PCA within Study Area	HER	DSC, 2009	-
30 - Importation of Fill Material of Unknown Quality	107	Imported Fill - DSC (2009) reported the presence of a small berm of fill material along the south portion of 85 Commissioners Street.	85 Commissioners Street	Onsite	Metals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-107	PCA within Study Area	HER	DSC, 2009	-
NA	108	Lead Paint and Piping - Terrapex (2009) reported that painted surface with suspected lead based paints or solder joints of drain piping were present onsite.	85 Commissioners Street	Onsite	Metals (lead)	Soil and Groundwater	YES	APEC-108	PCA within Study Area	HER	Terrapex, 2009	-
58 - Waste Disposal and Waste Management 45 - Pulp, Paper and Paperboard Manufacturing and Processing	109	Solid Waste Recycling Operation - DCS (2009) reported that Consolidated Fibres operated a wood and paper recycling operation on 95 Commissioners Street between 1972-1985/86. Plymouth Paper Products was also noted to be present at 95 Commissioners during this period. DCS (2009) reported the presence of various waste recycling facilities including First Canadian Recycling Ind. Ltd, Quno Recycling Corp and Donohue Recycling Inc. during the period of 1989 to 2005. Wastes noted to be present on site include waste oils and lubricants, paint, pigment, coating residues, polymeric resins, oil skimmings and sludges. Both 85 and 95 Commissioners were listed with a CoA for waste disposal transfer station under Harkow Recycling Ltd. in 1998 and 1999.	85 and 95 Commissioners Street	Onsite	PHC, metals/inorganics, PAHs, VOCs, BTEX	Soil and Groundwater	YES	APEC-109	PCA within Study Area	HER	DSC, 2009	-
55 - Transformer Manufacturing, Processing and Use	110	Transformers - Fluorescent light fixtures, floor and wall mounted transformers were noted by Terrapex (2009) in the industrial building on 95 Commissioners Street.	95 Commissioners Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-110	PCA within Study Area	HER	Terrapex, 2009	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	111	Potential Former AST- Terrapex (2009) noted that a 1991 Golder report discussed the presence of a 2,250 L AST containing diesel fuel located in the loading dock area of 95 Commissioners Street for refuelling front end loaders. The site was listed as a private fuel outlet under Quebec and Ontario Paper Recycling Ltd.	95 Commissioners Street	Onsite	PHCs, PAHs, BTEX	Soil and Groundwater	YES	APEC-111	PCA within Study Area	HER	Terrapex, 2009	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	112	Former USTs - Terrapex (2009) noted the presence of a 9,000 L UST present in the southwest corner of 95 Commissioners Street. The UST was installed in 1974 and reportedly removed in 1993. A single wall UST containing diesel fuel was reportedly installed at 95 Commissioners in 1993. Terrapex (2009) noted that it was unclear as to whether there was one or two USTs associated with 95 Commissioners Street.	95 Commissioners Street	Onsite	BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-112	PCA within Study Area	HER	Terrapex, 2009	-
46-Rail Yards, Tracks and Spurs	113	Rail Spurs - According to Terrapex (2009), a CN rail spur line was present at the east side of the industrial building on 95 Commissioners Street.	95 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-113	PCA within Study Area	HER	Terrapex, 2009	-
47-Rubber Manufacturing and Processing	114	Used Rubber Recycling-DSC (2009) reported that National Rubber Technologies (used rubber recycler) was present on 99 Commissioners Street from 1993 until the year the report was written in 2009.	99 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-114	PCA within Study Area	HER	DSC, 2009	-
46 - Rail Yards, Tracks and Spurs	115	Rail Spurs - According to DCS (2009), rail tracks associated with the former British Forging operation formerly traversed the north portion of 99 Commissioners Street.	99 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-115	PCA within Study Area	HER	DSC, 2009	-
8 - Chemical Manufacturing, Processing and Bulk Storage 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	116	Chemical Storage - DCS (2009) reported the presence of a chemical storage enclosure on 99 Commissioners Street used to contain waste materials, 4,500L diesel fuel tank (appears to be in an AST) for NRT vehicles and lubricating oils, located along the west fence line south of the main building. Stained areas were observed on the adjacent concrete refuelling pad to the east of the enclosure during the DCS (2007) investigation. The diesel AST was constructed of steel and placed within a steel containment structure which was surrounded by a low concrete containment wall. No staining due to fuel spillage was observed around the storage tank however 15 cm of fuel was present at the base of the steel containment unit.	99 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-116	PCA within Study Area	HER	DSC, 2009	-

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Potentially Contaminating Activity (PCA)[a]	PCA Unique ID	Descriptions of PCAs	Location of PCA[b]		Contaminants of Potential Concern (based on AP method groups[c])	Media Potentially Impacted (groundwater and/or soil)	PCA Results in APEC	Resulting APEC	Rationale	Information Source	HER Reference (as applicable)	FIP Reference (as applicable)
58 - Waste Disposal and Waste Management	117	Oil water separator - DSC (2009) reported that an oil water separator was present in the northcentral portion of the main building on the 99 Commissioners Street Property. Oil skimmings are pumped directly from the oi/water separator into a disposal truck.	99 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs	Soil and Groundwater	YES	APEC-117	PCA within Study Area	HER	DSC, 2009	-
47 - Rubber Manufacturing and Processing	118	Used Rubber Manufacturing Plant - DCS (2009) reported that the main building on the 99 Commissioners Street property is used solely for the storage and recycling of used vehicle tires. The southern half of the building serves as the receiving and storage area for the tires. The northern half of the building is occupied by several tire shredding lines, product storage and a maintenance shop. Process equipment used to melt shredded tire material (crumb) was also located in the north half of the building.	99 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-118	PCA within Study Area	HER	DSC, 2009	-
55 - Transformer Manufacturing, Processing and Use	119	Transformer Compound - DCS (2007) noted during their investigation that a transformer compound was present on the north west side of the main building on 99 Commissioners Street. DSC (2007) noted during their investigation that no equipment suspect of containing PCBs was observed as the main building was constructed 13 years after the federal ban on PCBs in new equipment.	99 Commissioners Street	Onsite	PCBs, PHCs, VOCs	Soil and Groundwater	YES	APEC-119	PCA within Study Area	HER	DSC, 2007	-
52-Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems NA	120	Fuel and Coal Storage-DCS(2009) reported that the 99A Commissioners Street was used for coal storage by Regal Coal Co. Ltd and fuel storage by Supertest Petroleum Co. Ltd between 1949 and 1961.	99a Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	Soil and Groundwater	YES	APEC-120	PCA within Study Area	HER	DSC, 2009	-
58 - Waste Disposal and Waste Management	121	Waste Processing Activities - DCS (2009) reported that 99 Commissioners Street was used by Harkow Aggregates for waste processing activities sometime after 1978 until 1989. During Harkow's occupancy of the property, a larger sized building was located within the south western part of the site with a smaller building in the northeast part of the site.	99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs,	Soil and Groundwater	YES	APEC-121	PCA within Study Area	HER	DSC, 2009	-
12 - Concrete, Cement and Lime Manufacturing 58 - Waste Disposal and Waste Management	122	Waste/Debris Piles - DSC (2009) reported that 99A Commissioners Street was vacant from approximately 1989 until the time their report was written and that numerous piles (one as high as 10 m) of brick, concrete and intermixed debris have been deposited on a majority of the site footprint, which has significantly reduced access to much of this property.	99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs, pH	Soil and Groundwater	YES	APEC-122	PCA within Study Area	HER	DSC, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	123	Former Tank Farm - Based on 1935 and 1951 FIPs and City Directories, Terrapex (2009) reported that the property at 225 Commissioners Street (formerly 101 Commissioners) was used as bulk fuel storage tank farm by Imperial Oil Ltd (mid 1930s-1980). 1935 FIP shows two 3,000,000 gal ASTs (oil tanks); 1953 aerial photo showed approximately 12 ASTs, 1951 FIP indicated 6 of these were 350,000-850,000 gal ASTs.	225 Commissioners (formerly 101 Commissioners)	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-123	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage 58 - Waste Disposal and Waste Management	124	Former Holding Pond - Based on a 1965 aerial photo (Terrapex, 2009), there appears to be a holding pond present in the southwest portion of 225 (formerly 101) Commissioners Street.	225 Commissioners (formerly 101 Commissioners)	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-124	PCA within Study Area	HER	Terrapex, 2009	-
46 - Rail Yards, Tracks and Spurs	125	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were present on north porton of 225 (former 101) Commissioners Street.	225 Commissioners (formerly 101 Commissioners)	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-125	PCA within Study Area	HER	Terrapex, 2009	-
46 - Rail Yards, Tracks and Spurs	126	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were present south porton of 185 Villiers Street.	185 Villiers Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-126	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	127	Former Fuel Oil Tank Farm - According to the 1951 FIP (Terrapex, 2009), Imperial Oil Ltd Bulk Plant had 6 steel ASTs ranging in size from approximately 2,000,000-3,000,000 gal on 185 Villiers Street.	185 Villiers Street	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-127	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	128	Former Fuel Oil Tank Farm - According to a 1951 FIP (Terrapex, 2009) Imperial Oil Ltd has 3 former fuel oil ASTs raning from approximately 1,000,000-2,000,000 gal at 625-675 Lake Shore Boulevard.	625-675 Lake Shore Boulevard	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-128	PCA within Study Area	HER	Terrapex, 2009	-
9 - Coal Gasification	129	Former Coal Tar Distillation - According to the 1951 FIP (Terrapex, 2009), The Barrett Co. used this property at 685 Lake Shore Boulevanrd for distilling of crude cola tar and saturating roofing felt.	685 Lake Shore Boulevard	Offsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-129	PCA adjacent to Study Area	HER	Terrapex, 2009	-
46 - Rail Yards, Tracks and Spurs	130	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were on the central portion of 685 Lake Shore Blvd (1951 FIP; Terrapex, 2009)	685 Lake Shore Boulevard	Offsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-130	PCA adjacent to Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	131	Former Fuel Oil AST- According to the 1953 FIP (Terrapex, 2009) 225 Commissioners street had one 4,500,000 gal fuel oil tank owned by Fuel Oil Equipment Ltd.	225 Commisioners Street	Offsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-131	PCA adjacent to Study Area	HER	Terrapex, 2009	-
28 - Gasoline and Associated Products Storage in Fixed Tanks	132	Former ASTs - According to the 1953 and 1973 FIPs (Terrapex, 2009), Sun Oil Co. had 5-6 ASTs (at least 2 appear to be upward of 2,800,000 gal gasoline tanks) on the east portion of 225 Commissioners Street immediately east of the Fuel Oil Equipment AST.	225 Commisioners Street	Offsite	PHCs, BTEX, PAHs, metals (for gasoline tanks)	Soil and Groundwater	YES	APEC-132	PCA adjacent to Study Area	HER	Terrapex, 2009	-
NA	133	Former Coal Storage - According to the 1953 FIP in the Terrapex (2009) report, J. Frank Jones Coal Ltd. stockpiled coal at 15 and 1-17 Basin Street.	15 and 1-17 Basin Street	Offsite	PAHs, metals	Soil and Groundwater	YES	APEC-133	PCA adjacent to Study Area	HER	Terrapex, 2009	-
30 - Importation of Fill Material of Unknown Quality	134	Soil Material Stockpiles - Based on an aerial Google view of the site at 1-17 Basin Street there appears to be stock piled material along the southern portion of the property.	1-17 Basin Street	Offsite	<etals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-134	PCA adjacent to Study Area	AER	-	-
58 - Waste Disposal and Waste Management 41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	135	Former Fuel Oil ASTs - According to the 1953 FIP (Terrapex, 2009), Fuel Oil Equipment Ltd occupied the property at 23 and 23 R Basin Street; 2 fuel oil ASTs were present (8,500,000 gal and 845,000 gal) and an oil and greasing room appear in the 1953 FIP.	23/23 R Basin Street	Offsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-135	PCA adjacent to Study Area	HER	Terrapex, 2009	-
30 - Importation of Fill Material of Unknown Quality	136	Soil Material Stockpiles - Based on an aerial Google view it appears that soil material is being stockpiled on the property at 101 Commissioners Street.	101 Commissioners Street	Onsite	Metals/inorganics, PAHs, PHCs	Soil and Groundwater	YES	APEC-136	PCA within Study Area	AER	-	-
28 - Gasoline and Associated Products Storage in Fixed Tanks 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	137	Former Tank Farm - According to 1951 and 1973 FIPs (Terrapex, 2009) Texaco Canada Oil Co. Ltd and McColl Frontenac Oil Co. used the majority of the block of land extending from 21 to 63 Commissioners Street (bound by Cherry Street to the west and the Shipping Channel to the south) as a tank farm. Approximately 34 ASTs were present across the site ranging in size from approximately 1600 barrels (Bbls) to more than 100,000 Bbls. Tanks contents varied across the site and included crude oil, benzol, furnace oil, gasoline, fuel oil and cycle (majority were approx. 80,000 Bbls). 28 smaller ASTs, approximately 1000 Bbls, were present in the northeast portion of the tank farm area and were noted to be blending and grease storage tanks. Texaco Canada occupied the western portion of the tank farm; McColl Frontenac occupied the eastern portion. Based on aerial photos from the Terrapex (2009) report, the tank farm was present on the property from 1947 until 1985; by 1992 many of the tanks had been removed. McColl Frontenac Oil Co. Ltd. – Oil Refinery (1925 to 1949); McColl Frontenac/Texaco – Petroleum Products Terminal, Blending, and Grease Plant (1949 to 1990); Imperial Oil (1990 to 1994). Historical reports indicate spills in the north section. LNAPL recovery program in 1990s. Full scale clean-up estimated to 310,000m^3 soil to 5.0 mbgs and 20,000 m^3 of LNAPL.	21-63 Commissioners Street, 185 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-137	PCA within Study Area	HER	CH2M, 2007; Terrapex, 2009	-

Table A1. Potentially Contaminating Activities within the Study Area

Port Lands, Toronto, ON

Potentially Contaminating Activity (PCA)[a]	PCA Unique ID	Descriptions of PCAs	Location of PCA[b]		Contaminants of Potential Concern (based on AP method groups[c])	Media Potentially Impacted (groundwater and/or soil)	PCA Results in APEC	Resulting APEC	Rationale	Information Source	HER Reference (as applicable)	FIP Reference (as applicable)
41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	138	Former Oil Separator - According to a 1951 FIP (Terrapex, 2009) an oil seperator was present immediately northwest of the tank farm on the former Texaco Canada lands at 21 Commissioners Street. The oil seperator was likely part of Texaco Canada operations to the immediate south.	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs	Soil and Groundwater	YES	APEC-138	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	139	Former ASTs - According to a 1951 FIP (Terrapex, 2009) seven 500 Bbls marketing tanks were present in the northwest portion of the property at 21 Commissioners Street. Another four smaller ASTs were present immediately west of the marketing tanks, south of the garage. These tanks were likely part of the Texaco Canada operations to the immediate south.	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-139	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	140	Former Garage - According to a 1951 FIP (Terrapex, 2009) a garage was present at the northwest corner of the property at 21 Commissioners Street.	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-140	PCA within Study Area	HER	Terrapex, 2009	-
59 - Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products	141	Cabinet Manufacterer - According to a 1951 FIP (Terrapex, 2009) a building that housed Kent McClain Ltd Cabinet Manufacturing was present in the north portion of 31-39 Commissioners Street. Noted within the building were a glue department, box making, finishing room and a garage immediately west of the main building. A smaller shipping and storge area was present immediately east of the main building.	31-39 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-141	PCA within Study Area	HER	Terrapex, 2009	-
41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	142	Blending and Grease Building, Tank House, Drum Reconditioning-shown in the 1951 FIP (Terrapex, 2009) as part of the McColl Fontenac operations at 63 Commissioners Street.	63 Commissioners Street	Onsite	PHCs, BTEX, PAHs, metals	Soil and Groundwater	YES	APEC-142	PCA within Study Area	HER	Terrapex, 2009	-
43 - Plastics (including Fibreglass) Manufacturing and Processing	143	Polymerization Plant - According to a 1951 FIP (Terrapex, 2009) a polymerization plant was present on the McColl Frontenac portion of the tank farm area (northwest portion) and appeared to be part of the oil processing operations part of the tank farm.	5741 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Soil and Groundwater	YES	APEC-143	PCA within Study Area	HER	Terrapex, 2009	-
46 - Rail Yards, Tracks and Spurs	144	Rail Sidings - According to the 1951 and 1973 FIPs (Terrapex, 2009) rail sidings were on the central north and south portion of the site occupied by Texaco Canada and McColl Frontenac.	33-63 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	Soil and Groundwater	YES	APEC-144	PCA within Study Area	HER	Terrapex, 2009	-

Notes:

[a] PCA – potentially contaminating activity (as defined by O.Reg. 153/04, as amended)

[b] Refer to Figure 4A through 4E for PCA/APEC locations

[c] As noted in the "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*" March 9, 2004, amended as of July 1, 2011.

NA - Not applicable, the PCA does not fit into the available MOECC PCA types, however is still considered of potential environmental concern as a PCA.
"-" - no information
ABNs - acid-base neutrals
AER - Aerial Photograph
APEC – Area of Potential Environmental Concern
AST – Aboveground storage tank
BTEX – Benzene, toluene, ethylbenzene, and xylenes
cm - centimetres
EC – Electrical conductivity
FIP – Fire insurance plan
HER – Historical Environmental Reports
ID – Identification
L - litres
LNAPL - light non-aqueous phase liquid
m – metre
m^3 – cubic metres
mbgs - metres below ground surface
MOECC – Ontario Ministry of the Environment and Climate Change
offsite – on an adjacent or adjoining property to the Study Area
onsite – within the Port Lands Study Area
PAHs – Polycyclic aromatic hydrocarbons
PCA – Potentially contaminating activity
PCBs – Polychlorinated biphenyls
PHCs – Petroleum hydrocarbons
SAR – Sodium adsorption ratio
UST – Underground storage tank
VOCs – Volatile organic compounds

Table A2. Areas of Potential Environmental Concern within the Port Lands

Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-001	AST - A fuel oil AST was located within the warehouse building at 54 Commissioners Street. Golder (2014) observed that the AST did not have secondary containment and that localized staining of the floor was observed in the vicinity of the AST.	28 - Gasoline and Associated Products Storage in Fixed Tanks	54 Commissioners Street	Onsite	BTEX, PHCs, PAHs	PAHs, PCB, PHC, VOC/BTEX	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil only. No groundwater sampling completed at APEC.
APEC-002	Former Foundry and Former Steel Machine Shop - A former foundry was reported to have been located on 309 Cherry Street from 1912 to 1917, and a former steel machine shop from 1928 to 1935. Heavy metals found in soils from previous investigations.	32 - Iron and Steel Manufacturing and Processing 33 - Metal Treatment, Coating, Plating and Finishing 34 - Metal Fabrication	309 Cherry Street	Onsite	VOCs, PAHs, PHCs, complete metals and inorganics, phenols (ABNs) (if foundry sand)	ABN, pH, PAHs, VOCs, metals/inorganics, PCBs, PHCs	ABN, pH, PAHs, VOCs, metals/inorganics, PCBs, PHCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-003	Machine Shop and Foundry - The Queen's Foundry and later the Bond Engineering Works operated at 16 Munition Street from approximately 1917 to the 1970s. Historical reports indicate metal exceedances to 1.0 mbgs.	32 - Iron and Steel Manufacturing and Processing 33 - Metal Treatment, Coating, Plating and Finishing 34 - Metal Fabrication	10 to 16 Munition Street	Onsite	VOCs, PAHs, PHCs, complete metals and inorganics, phenols (ABNs) (if foundry sand)	None	None	No sample locations associated with APEC
APEC-004	Former Steel Fabrication, Metal Working and Shop - Structural Steel Fabrication (1920s to 1950s) and Metal Working and Shop Repair (1960s to 1980s). Impacts reported from historical reports to a depth of 1.5 mbgs (PHCs, PAHs, EC).	32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication	80 Commissioners Street	Onsite	Metals, PAHs, phenols (ABNs) (if foundry sand)	pH, PAHs, VOCs, metals/inorganics, PCBs, PHCs	pH, PAHs, VOCs, metals/inorganics, PHCs	Not all COCs have been captured by current or historical sampling activities. Phenols (ABNs) not currently analyzed for in soil or groundwater.
APEC-005	Former Steel Plant - British Forgings/Baldwin Steel Plant operated at this property from approximately 1914 to 1928.	32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication	21-51 and 63, 75, 85, 95, 99, 99a Commissioners Street, 181 to 185 Cherry Street	Onsite	Metals, PAHs, phenols (ABNs) (if foundry sand)	pH, PAHs, VOCs, metals/inorganics, PHCs	pH, PAHs, VOCs, metals/inorganics, PHCs	Not all COCs have been captured by current or historical sampling activities. Phenols (ABNs) not currently analyzed for in soil or groundwater.
APEC-006	Former Coal Storage - McColl Bros. Ltd./McColl Frontenac/Texaco developed land on the east side of Cherry Street and used 222 Cherry Street for coal storage (late 1940s to early 1950s).	NA	222 Cherry Street	Onsite	Metals, PAHs	pH, PAHs, VOCs, metals/inorganics, PHCs, PCBs	pH, PAHs, VOCs, metals/inorganics, PHCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-007	Former Transformer Use - Presence of a row of four transformers shown on a 1973 FIP along the exterior of the east building wall.	55- Transformer Manufacturing, Processing and Use	222 Cherry Street	Onsite	PHCs, PCBs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Not all COCs have been captured by current or historical sampling activities. PCBs not currently analyzed for in soil or groundwater. No groundwater sampling completed at APEC.
APEC-008	Former UST - Presence of a UST shown on a 1973 FIP at the extreme southwestern corner of the building, located beneath the loading dock extension.	28 - Gasoline and Associated Products Storage in Fixed Tanks	222 Cherry Street	Onsite	PHCs, VOCs, metals	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil; however, not all COCs have been captured for groundwater. PHCs not currently analyzed for in groundwater.
APEC-009	Salt Usage - Site was used as a grocery store from 1973 to 2000 with a large portion of the Site dedicated to parking where salt application for de-icing was conducted.	NA	222 Cherry Street	Onsite	Inorganics (EC, SAR)	pH, inorganics (incl. EC, SAR)/metals, PAHs, PCB, PHC, VOC	pH, inorganics (incl. EC, SAR)/metals, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-010	Fuel Oil Spill - EcoLog ERIS reports a fuel oil spill of unknown quantity from a UST located at 54 Polson Street in April 1993.	28 - Gasoline and Associated Products Storage in Fixed Tanks	54 Polson Street	Onsite	BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC
APEC-011	Oil Spill - EcoLog ERIS reports a catch basin at 63 Polson Street which was overflowing with oil and migrated to Polson Street in May 2000.	28 - Gasoline and Associated Products Storage in Fixed Tanks	63 Polson Street	Onsite	BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC
APEC-012	Cement Plant - Based on City Directories, Canada Cement Company/LaFarge Canada has operated at 54 Polsen Street (formerly Carton Street) since the early 1940s.	12 - Concrete, Cement and Lime Manufacturing	54 Polson Street	Onsite	pH	None	None	No sample locations associated with APEC
APEC-013	Former Coal Storage - City Directories list various coal companies at 190 Cherry Street between 1940 and 1951.	NA	190 Cherry Street	Onsite	Metals, PAHs	None	None	No sample locations associated with APEC

Table A2. Areas of Potential Environmental Concern within the Port Lands

Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-014	Former Coal Storage - 1953 FIP shows coal stockpiled on the western half of 20 Polson Street (Toronto Fuels Ltd.).	NA	20 Polson Street	Onsite	Metals, PAHs	pH, PAHs, VOCs, metals/inorganics, PHCs, PCBs, perchlorate	pH, PAHs, VOCs, metals/inorganics, PHCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-015	Former Coal Storage - 1951 FIP shows coal stockpiles across 176 Cherry Street (Toronto Fuels Ltd. and Ontario Dock & Forwarding Co. Ltd).	NA	176 Cherry Street	Onsite	Metals, PAHs	None	None	No sample locations associated with APEC
APEC-016	Imported Fill - Borehole logs for 20 Polson Street indicate the presence of fill materials .	30 - Importation of Fill Material of Unknown Quality	20 Polson Street	Onsite	Metals/inorganics, PAHs, PHCs	pH, PAHs, VOCs, metals/inorganics, PHCs, PCBs, perchlorate	pH, PAHs, VOCs, metals/inorganics, PHCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-017	Imported Fill - Borehole logs for 222 Cherry Street indicate the presence of fill materials.	30 - Importation of Fill Material of Unknown Quality	222 Cherry Street	Onsite	Metals/inorganics, PAHs, PHCs	pH, inorganics/ metals, PAHs, PHCs, VOCs, PCBs	pH, inorganics/metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-018	Former Rail Spurs - 1973 and 1976 FIPs shows a rail spur entering 222 Cherry Street in the northwestern corner and running the length of the western property boundary to the southern wall of the building; 1976 FIP shows a rail spur entering 20 Polson Street from the centre of the eastern property boundary and running through the centre of the property before terminating on Polson Street near the southwestern corner of the property; 1951, 1973, and 1976 FIPs shows rail spurs entering the 176 Cherry Street near the northeastern corner of the property. One set runs through to the centre of the property, while another creates a large oval and links back to the northeastern corner. 1951, 1973, and 1976 FIPs shows rail spurs running in a east-west direction along almost the entire length of Polson Street, terminating at Lake Ontario. 1951, 1973 and 1976 FIPs shows rail spurs entering 54 Polson Street in the northeastern corner with one spur running towards the southern boundary (1951 only) and additional spurs running through the centre of the property terminating near the western property boundary.	46 - Rail Yards, Tracks and Spurs	176, 222 Cherry Street; 1-63 Polson Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	pH, inorganics/ metals, PAHs, PHCs, VOCs, PCBs, Perchlorate	pH, inorganics/metals, PAHs, PHCs, VOCs	Not all COCs have been captured by current or historical sampling activities. OC Pesticides and chlorophenols not currently analyzed for in soil or groundwater.
APEC-019	Former Transformer Use - 1973 FIP shows a transformer located on the south side of a cluster of four concrete silos on 54 Polson Street, adjacent to Polson Street.	55- Transformer Manufacturing, Processing and Use	54 Polson Street	Onsite	PCBs, PHCs, VOCs	None	None	No sample locations associated with APEC
APEC-020	Scrap Metal Handling/Fabrication - 1973 FIP shows a scrap metal yard. City Directories list Warehouse Metals/Industrial Metal Co. of Canada between the years 1961 and 1982.	32 - Iron and Steel Manufacturing and Processing 34 - Metal Fabrication 49 - Salvage Yard, including automobile wrecking	176 Cherry Street	Onsite	PCBs, VOCs, PAHs, PHCs, metals, phenols (ABNs) (if foundry sand)	None	None	No sample locations associated with APEC
APEC-021	Former Can Company - 1976 FIP shows the Continental Can Company of Canada Limited located on the south side of Polson Street.	34 - Metal Fabrication	1 - 63 Polson Street	Onsite	Metals	None	None	No sample locations associated with APEC
APEC-022	Former Paperboard Manufacturing - 1935 and 1951 FIPs show Dominion Boxboards Limited (1935) and Gair Co. Canada Limited (1951) located on the south side of Polson Street.	45 - Pulp, Paper and Paperboard Manufacturing and Processing	1 - 63 Polson Street	Onsite	Metals/inorganics	None	None	No sample locations associated with APEC
APEC-023	Vehicle Storage Area - Golder (2013) indicates that the western portion of 312 Cherry Street was historically used for intermittent storage of vehicles and tractor trailers (1970s to 1990s). An AST was reportedly used for refuelling activities.	11 - Commercial Trucking and Container Terminals 28 - Gasoline and Associated Products Storage in Fixed Tanks	312 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals (lead)	pH, PAHs, VOCs, metals/inorganics, PHCs	pH, PAHs, VOCs, metals/inorganics, PHCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-024	Former Rail Spurs - Golder (2013) indicates that a railway line was located to the east of 312 Cherry Street and that spurs extended onto the property.	46 - Rail Yards, Tracks and Spurs	312 Cherry Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC

Table A2. Areas of Potential Environmental Concern within the Port Lands

Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-025	Transformer Use - Golder (2013) reports the presence of a pad-mounted transformer (1,817 L) located north of the office building at 312 Cherry Street. A 2004 inspection report reviewed by Golder indicated the transformer oil PCB concentration is approximately 27 ppm .	55- Transformer Manufacturing, Processing and Use	312 Cherry Street	Onsite	PCBs, PHCs, VOCs	None	None	No sample locations associated with APEC
APEC-026	Ship Docking Areas - Golder (2013) reports that docking areas on the north, west, and south sides of 312 Cherry Street may have been used by Century Coal for the storage and transfer of coal. SLR (2009) reports that the property was used as a foundry yard and ship dockage from 1912 to 1917.	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	312 Cherry Street	Onsite	PHCs, metals, PAHs, phenols (ABNs) (if foundry sand)	None	None	No sample locations associated with APEC
APEC-027	Former Rail Spurs - ran from the west between Villiers and Commissioners Streets to the northeast corner of 165 Villiers (Golder, 1992a). The property at 10 Munition Street has been historically used for a railway right of way to access 309 Cherry Street (CH2M, 2008b). FIPs from 1935 and 1951 show a rail spur entering the property at 16 Munition Street from the north and running along the west side of the building (Golder, 2013). 1935 FIP shows a rail spur entering 54 Commissioners along the centre of the northern property boundary and terminating at the rear of the building; 1935 FIP shows a rail spur entering 54 Commissioners along the centre of the northern property boundary and terminating at the rear of the building(Golder, 2013; Golder, 2014). FIPs from 1935 and 1951 show a rail spur entering the property at 2 Villiers Street from the southeast corner (Golder, 2013).	46 - Rail Yards, Tracks and Spurs	Between Commissioners and Villiers Streets	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	pH, ABNs, PAHs, VOCs, metals/ inorganics, PHCs	ABNs, PAHs, VOCs, metals/inorganics, PHCs	Not all COCs have been captured by current or historical sampling activities. OC Pesticides and chlorophenols not currently analyzed for in soil or groundwater.
APEC-028	Solvent Recovery Operations - Anachemicia Chemicals, a solvent recovery company, had an oil fired boiler house, and four storage tanks located between the rail spurs on 165 Villiers Street. Waste products were received in 45 gallon drums and typically included mineral spirits, Shellsol and Varsol.	28 - Gasoline and Associated Products Storage in Fixed Tanks 51 - Solvent Manufacturing, Processing and Bulk Storage 58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	165 Villiers Street	Onsite	VOCs, PHCs, PAHs, PCBs, metals	PAHs, VOCs, inorganics/metals, PHCs	ABNs, PAHs, VOCs, OCP, metals/ inorganics, PHCs	Not all COCs have been captured by current or historical sampling activities. PCBs not currently analyzed for in soil or groundwater.
APEC-029	Grease Building - an "open grease building" was indicated along the rail spur on a 1955 site plan for Fielding Chemicals Limited. The DCS report (2006a) indicated that a previous Golder report noted the building to be present from 1954 to 1966.	NA	150 Commissioners / along Rail Spur	Onsite	VOCs, BTEX, PHCs	None	None	No sample locations associated with APEC
APEC-030	Former Coal Storage - Anthracite Briquette Company manufactured coal briquettes on 150 Commissioners Street beginning in 1919, and a coal shed was indicated on the southern portion of the property.	NA	150 Commissioners	Onsite	PAHs, Metals	ABNs, PAHs, VOCs, OCP, metals/ inorganics, PHCs	ABNs, OCP, PAHs, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil however not all COCs have been captured for groundwater. Metals are not currently analyzed for in groundwater.
APEC-031	Imported Fill - Land reclamation occurred in the area in approximately 1913 to 1917. Material was dredged from the east end of the Toronto Harbour into the Ashbridges Bay area.	30 - Importation of Fill Material of Unknown Quality	Study Area south of Keating Channel	Onsite	metals/inorganics, PAHs, PHCs	ABNs, PAHs, VOCs, OCP, Inorganics, metals, PHCs, pH, PCB, ortho-phosphate	ABNs, PAHs, VOCs, OCP, Inorganics, Metals, PHCs, pH, SVOC, PCB	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-032	Potential USTs - Two diesel USTs located east of the former building on 105 Villiers street identified in the Phase II ESA by Golder (1992). An area of 1,200 cubic meters was estimated to be impacted. The diesel tanks were removed from the site in November 1996. Strong odours were present in the soils surrounding the tanks but no evidence of visible product and no soils were removed. Verification samples (6) were below Table B industrial/commercial criteria.	28 - Gasoline and Associated Products Storage in Fixed Tanks	105 Villiers	Onsite	BTEX, PHCs, PAHs	Inorganics/metals, PAHs, PHCs, VOCs	Inorganics/metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

Table A2. Areas of Potential Environmental Concern within the Port Lands

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Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-033	Potential USTs and AST - Four USTs were identified: two gasoline USTs in the west end of the 105 Villiers courtyard, and two fuel oil USTs on the east side of the 105 Villiers building (one within the building footprint and one just outside). The UST outside the east side had an estimated capacity of 250 gallon, the other UST sizes are unknown. One fuel oil AST was identified in the southeast corner of the 105 Villiers courtyard; size of the tank is 1000 gallons. Investigations conducted by Adamas and DCS have indicated the soil in the area of these tanks have been impacted with PHCs and BTEX due to filling operations and/or leaks from tanks. Geophysical surveys conducted by DCS (1997) could not confirm the presence of the USTs in the west end of the courtyard. The two USTs on the east side of 105 Villiers building were removed in December 1996. No evidence of grossly contaminated soils were observed; verification soil samples (9) were below Table B industrial/commercial criteria and the excavation was backfilled.	28 - Gasoline and Associated Products Storage in Fixed Tanks	105 Villiers	Onsite	PHCs, BTEX, metals (lead)	Inorganics/metals, PAHs, PHCs, VOCs, ABNs, OCPs, pH	Inorganics/metals (incl. lead), PAHs, PHCs, VOCs/BTEX, ABNs, OCPs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-034	Ship Repairs - Two ship repair companies listed in City Directories for the years 1960 to 1976. DCS (2002b) indicated that these operations were conducted out of the buildings located on the southern property boundary of 80 Commissioners Street.	7 - Boat Manufacturing	80 Commissioners Street	Onsite	Metals, PHCs, VOCs	None	None	No sample locations associated with APEC
APEC-035	UST - An unused UST was located north of the building located in the southwestern corner of 80 Commissioners Street. DSC (2002b) measured product within the tank and estimated it's capacity as less than 4,500-L.	28 - Gasoline and Associated Products Storage in Fixed Tanks	80 Commissioners Street	Onsite	PHCs, VOCs, metals (lead)	None	None	No sample locations associated with APEC
APEC-036	Potential USTs, Oil/Water Separator - three potential fuel oil USTs were identified on the east side of the building at 105 Villiers Street; two USTs were 240 gallons and the third was 2000 gallons. Geophysical surveys conducted by DCS (1997) could not confirm the presence of these USTs, and investigations uncovered an oil water separator in the vicinity. The oil/water separator was removed November 1996, and a small amount of grossly contaminated soils were excavated (no volume indicated). 5 Verification samples were below Table B industrial/commercial criteria and the excavation was backfilled.	28 - Gasoline and Associated Products Storage in Fixed Tanks	105 Villiers	Onsite	PHCs, BTEX, PAHs	None	None	No sample locations associated with APEC
APEC-037	Former UST - a 2000 gallon fuel oil UST was identified on the west side of the building at 155 Villiers Street; the UST was removed in December 1996 and the tank was noted to be rusted with perforations. Free product was observed on the groundwater infiltrating into the excavation, and grossly contaminated soil was excavated for disposal (volume not indicated). An extraction well was installed in June 1997.	28 - Gasoline and Associated Products Storage in Fixed Tanks	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC
APEC-038	Former UST - a 2000 gallon fuel oil UST was identified on the north side of the building at 150 Commissioners Street; the UST was removed in November 1996 and the tank was noted to be rusted with perforations. No evidence of grossly contaminated soils were observed; verification soil samples (3) were below Table B industrial/commercial criteria and the excavation was backfilled.	28 - Gasoline and Associated Products Storage in Fixed Tanks	150 Commissioners	Onsite	BTEX, PHCs, PAHs	Inorganics/metals, PAHs, PHCs, VOCs, PCBS	Inorganics/metals, VOCs, PCBS	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil however not all COCs have been captured for groundwater. PAHs and PHCs are not currently analyzed for in groundwater.
APEC-039	Former UST - a 1000 gallon "dirty Varsol" UST was reported located on the north end of the building at 155 Villiers Street. The UST was removed in November 1996 and very strong solvent odours were present in the soils surrounding the tank including a visible sheen. The sidewalls of the excavation were advanced until the sheen was no longer observed. An approximate 80 m^2 area was excavated to a depth ranging from 2.5 to 2.7 mbgs. Seven verification soil samples were collected, two samples (on the north and west wall at 1.5 mbgs) indicated xylene concentrations above Table B industrial/commercial criteria with concentrations of 150 ppm and 128 ppm.	28 - Gasoline and Associated Products Storage in Fixed Tanks	155 Villiers Street	Onsite	BTEX, PHCs, VOCs	Inorganics/metals (lead)	None	No COCs have been captured by current or historical sampling activities for soil. No groundwater sampling completed at APEC.
APEC-040	Potential USTs - one fuel oil UST was identified within the building footprint at 155 Villiers, size of tank is unknown, Geophysical surveys conducted by DCS (1997) were not able to confirm the location/presence.	28 - Gasoline and Associated Products Storage in Fixed Tanks	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC

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Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-041	Former AST - two fuel oil ASTs were identified south of the building at 155 Villiers Street. Tanks had a capacity of 500 gallons.	28 - Gasoline and Associated Products Storage in Fixed Tanks	155 Villiers Street	Onsite	BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC
APEC-042	Former UST - a 1000 gallon fuel oil UST was removed in November 1996. No grossly contaminated soils were observed; verification soil samples (4) were below Table B industrial/commercial criteria and the excavation was backfilled.	28 - Gasoline and Associated Products Storage in Fixed Tanks	165 Villiers Street	Onsite	BTEX, PHCs, PAHs	Inorganics/metals (not all O.Reg. 153/040 metals included), ortho-phosphate	None	No COCs have been captured by current or historical sampling activities for soil. No groundwater sampling completed at APEC.
APEC-043	Chemical Storage - Fielding & Sons (Later Fielding Chemicals Limited - Naval Stores and Heavy Chemicals) were brokers and dealers of a variety of products including spirits of turpentine and glues to soap powder and poultry netting. They occupied the property at 165 Villiers from approximately 1919 to approximately 1964.	NA	165 Villiers Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	ABNs, OCP, PAHs, PHCs, VOCs, pH, metals/inorganics	ABNs, OCP, PAHs, PHCs, VOCs, pH, metals/inorganics	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-044	Smith Transport Warehousing - The Adamas report indicated the building on 150 Commissioners to be used for offices and sheds to support the transport business from 1935, but added warehousing in 1939 on the eastern end.	NA	105 Villiers	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Inorganics/metals, PAHs, PHCs, VOCs	Inorganics/metals (not all O.Reg. 153/04 metals are included), VOCs, pH	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil however not all COCs have been captured for groundwater. Some metals have not been analyzed for in groundwater.
APEC-045	Smith Transport Trailer Repair Shop - Smith Transport was a transport business; the building on the 155-165 Villiers property was built sometime after 1964 for the repair of trailers.	NA	155-165 Villiers Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Inorganics/metals, PAHs, PHCs, VOCs, pH	Inorganics/metals, PAHs, PHCs, VOCs, pH, ABNs, OCP	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-046	Smith Transport Warehousing - The Adamas report indicated the building on 150 Commissioners to be used for warehousing. Smith Transport occupied this site from approximately 1949, and initially used it for temporary truck parking.	NA	150 Commissioners	Onsite	VOCs, PHCs, metals/inorganics, PAHs	Inorganics/metals, PAHs, PHCs, VOCs, ABNs, OCP, PCBs, SVOCs, pH	Inorganics/metals, PAHs, PHCs, VOCs, ABNs, OCP, PCBs, SVOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-047	Electrical Substation - Toronto Hydro operated an electrical substation at 281 Cherry Street from the 1920s to approximately 1995.	18 - Electricity Generation, Transformation and Power Stations	281 Cherry Street	Onsite	PCBs, PHCs, VOCs	ABNs, Inorganics/metals, PHCs, PCBs, VOCs, pH	ABNs, Inorganics/metals, PHCs, PCBs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-048	Former Transformer Use - CH2M (2008) and OHE (2011) reports that up to two transformers were formerly located in the southeast corner of the building at 281 Cherry Street.	55 - Transformer Manufacturing, Processing and Use	281 Cherry Street	Onsite	PCBs, PHCs, VOCs	None	None	No sample locations associated with APEC.
APEC-049	Commercial Refrigeration Manufacturer - Commercial refrigeration equipment has been manufactured, serviced, or both at 65 Villiers Street, from approximately the 1920s to the present. FIPs from 1935 and 1951 show coal storage, a garage, a woodworking building, and a welding room.	34 - Metal Fabrication	65 to 95 Villiers Street	Onsite	Metals, PHCs, VOCs, PAHs	None	None	No sample locations associated with APEC.
APEC-050	UST - DCS (2002b) reports the presence of an oil UST within the main building at 65 Villiers Street based on information received from the TSSA.	28 - Gasoline and Associated Products Storage in Fixed Tanks	65 to 95 Villiers Street	Onsite	PHCs, PAHs, BTEX	None	None	No sample locations associated with APEC.
APEC-051	Port Uses - City Directories indicate that 62 Villiers Street has been used by the Toronto Harbour Commissioners from at least the late 1920s for port uses. Use of this property as a Dry Dock was listed in the City Directories for 1927 only (the first year available for review).	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	62 Villiers Street	Onsite	PHCs, VOCs, metals, PAHs	Inorganics/metals, PAHs, PHCs, VOCs, pH, PCBs	Inorganics/metals, PAHs, PHCs, VOCs, pH	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-052	Former Coal Storage - Based on City Directories and FIPs, Milnes Coal Co. operated from 2 Villiers Street from at least 1927 to 1935.	NA	2 Villiers Street	Onsite	PAHs, metals	Inorganics/metals, PAHs, PHCs, VOCs, pH	Inorganics/metals, PAHs, PHCs, VOCs, pH	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-053	Former Gas Station - EcoLog ERIS reports the presence of a British American Oil Co. Ltd. service station located at 309 Cherry Street which had one 1,514-L gasoline UST and three 3,785-L gasoline USTs in 1934.	28 - Gasoline and Associated Products Storage in Fixed Tanks	309 Cherry Street	Onsite	PHCs, BTEX, metals (lead)	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

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APEC-054	Former Bulk Fuel Storage - McColl Bros./McColl Frontenac Oil Co. Ltd. at 309 Cherry Street is listed in EcoLog ERIS to have been a petroleum bulk storage site with tanks containing several hundred thousand litres of petroleum and crude oils for the years 1925 and 1930. Bulk fuel storage was conducted at the property from approximately 1938 to the 1990s. SLR (2014) reports that a 1987 Golder report indicates the presence of PHC contaminated at the property to a depth of 4 mbgs. Floating product ranging in thickness between 0.15 and 0.7 m was historically found in monitoring wells located in the centre of the property.	28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	309 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals	Inorganics/metals, PAHs, PHCs, VOCs, pH, PCBs, ABNs	Inorganics/metals, PAHs, PHCs, VOCs, pH, PCBs, ABNs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-055	Former Oil Recycling - AquaTech Blue Ltd. operated an oil recycling facility at 309 Cherry Street. The company was fined over $700,000 in August, 2000 for allowing the discharge of PHCs from this property to the Keating Channel. EcoLog ERIS reports that this property has PCB-containing equipment and stores PCBs (1999 and 2000). EcoLog ERIS reports several spills and explosive vapour readings in storm sewers between the years 1994 to 1999, which are associated with AquaTech Blue's use of the property.	16 - Crude Oil Refining, Processing and Bulk Storage	309 Cherry Street	Onsite	PHC, BTEX, PAHs, PCBs, VOCs, metals/inorganics	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-056	Waste Processing - Quantex Technologies has operated a waste transfer/processing facility at 309 Cherry Street from approximately 1999 to the present. EcoLog ERIS reports several spills for years between 2000 and 2011, which are associated with Quantex's use of the property.	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	309 Cherry Street	Onsite	PHC, BTEX, PAHs, PCBs, VOCs, metals/inorganics, OC pesticides	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs, PCBs	Not all COCs have been captured by current or historical sampling activities. OC Pesticides not currently analyzed for in soil or groundwater.
APEC-057	USTs - EcoLog ERIS reports that the Toronto Port Authority operated a private fuel outlet at 62 Villiers Street between 2007 and 2011. The property is listed as having two USTs, one for gasoline and one for diesel (4,500 L each), both installed in 1989.	28 - Gasoline and Associated Products Storage in Fixed Tanks	62 Villiers Street	Onsite	PHCs, BTEX, metals (lead)	pH, inorganics/metals, PAHs, PHCs, VOCs, PCBs	pH, inorganics/metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-058	Oil Storage - SLR (2009) reports that 2 Villiers Street was used for oil storage from approximately 1940 to 1950.	16 - Crude Oil Refining, Processing and Bulk Storage	2 Villiers Street	Onsite	PHCs, BTEX, PAHs, metals	pH, inorganics/metals, PAHs, PHCs, VOCs	pH, inorganics/metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-059	Coal Gasification Plant - The Consumers Gas Company appears on FIPs from 1913 and 1924, and aerial photographs from 1947 at the southwestern corner of Eastern and Booth Avenues.	9 - Coal Gasification	Southwestern corner of Eastern and Booth Avenues	Onsite/Off site	PHCs, BTEX, PAHs, VOCs, metals	None	None	No sample locations associated with APEC
APEC-060	Bulk Tank Farm - 1913 and 1924 FIP show a bulk tank farm on the north side of the Keating Channel on the east side of Cherry Street. The company name is not labelled in 1913, but is listed as the British North American Oil Company in the 1924 FIP. The structures/tanks associated with this property extend east to the Don River on the 1924 FIP. The tank farm, extending west from Cherry Street, south to the Keating Channel, north to the railway lines, and east to the Don River, is visible on aerial photographs until 1971. A 1983 aerial shows that all of the large ASTs have been removed from this property.	28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	Northeastern corner of Cherry Street and Keating Channel, west to Don River	Onsite/ Offsite	PHCs, VOCs, PAHs, metals	ABNs, PAHs, VOCs, CP, OCP, metals/ inorganics, PHCs, pH, PCB	ABNs, PAHs, VOCs, CP, OCP, metals/ inorganics, PHCs, pH, PCB, metals	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-061	Railway Main Lines/Yard - Grand Trunk Railway lines are shown on the 1913 and 1924 FIPs. These railway lines are still in place based on current aerial mapping.	46 - Rail Yards, Tracks and Spurs	North of Keating Channel, west of Don River	Onsite/ Offsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	Selenium	No COCs have been captured by current or historical sampling activities.
APEC-062	Iron Manufacturing - 1913 and 1924 FIPs show the National Iron Corporation Limited on a parcel of land located at the northwestern corner of Cherry Street on the north side of the Keating Channel, extending west to Parliament Street.	32- Iron and Steel Manufacturing and Processing	Northwestern corner of Cherry Street and Keating Channel	Onsite/ Offsite	Metals, PAHs, phenols (ABNs) (if foundry sand), PHCs	None	None	No sample locations associated with APEC
APEC-063	Soap Manufacturing - 1903, 1913, and 1924 FIPs shows the Sunlight Soap Works plant. Expansion to the main plant building is evident in the FIPs over the years, as is the construction of additional buildings.	50 - Soap and Detergent Manufacturing, Processing and Bulk Storage	South of Eastern Avenue, west of Don River, north of CNR Rail lines	Offsite	pH, SAR	None	None	No sample locations associated with APEC

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APEC-064	Former Coal Storage - 1958 FIP indicates that Canada Coal Ltd. occupied 238 Cherry Street.	NA	238 Cherry Street	Onsite	Metals, PAHs	pH, inorganics/ metals, PAHs, PHC, VOC	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-065	Former USTs/ASTs - EcoLog ERIS report cited in Golder (2013) indicated the presence of a 757-L tank of gasoline from 1919 and 1928 and a 378-L tank of gasoline in 1921 at 256 Cherry Street associated with Century Coal Ltd.	28 - Gasoline and Associated Products Storage in Fixed Tanks	256 Cherry Street	Onsite	PHCs, BTEX, metals (lead)	pH, inorganics/ metals, PAHs, PHC, VOC	pH, inorganics/ metals, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-066	Former Marine Terminal - According to City Directories, portions of 242 Cherry Street were used as a marine terminal/wharf from approximately 1925 to 1982.	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	242 Cherry Street	Onsite	PHCs, VOCs, metals, PAHs	pH, inorganics/ metals, PAHs, PHC, VOC, PCBs	pH, inorganics/ metals, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-067	Recycling and Waste Transfer Station - EcoLog ERIS report cited in Golder (2013) indicates that Turtle Island Recycling has several convictions under the Environmental Protection Act, for failure to comply with their Certificate of Approval, including illegal storage of wastes outdoors. The property is currently used as a recycling and waste transfer station operated by GFL Environmental.	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	242 Cherry Street	Onsite	Metals/inorganics, PAHs, PAHs, VOCs, PCBs, PHCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-068	Former Coal Storage - Century Coal occupied 256 and 312 Cherry Street from approximately 1932 to the late 1950s.	NA	256 and 312 Cherry Street	Onsite	Metals, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-069	Vehicle Maintenance and Storage - Golder (2014) reports that 54 Commissioners was used for personal vehicle maintenance between approximately 1995 and 2011, with vehicle storage occurring in the southwestern corner and along the western property boundary.	52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	54 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	PAHs, PHC, VOC, PCBs	None	Not all COCs have been captured by current or historical sampling activities. Metals not currently analyzed for in soil. No groundwater sampling completed at APEC.
APEC-070	Former Overhead Cranes - Crane runways/travelling cranes are depicted on both sides of the main building at 80 Commissioners on FIPs and City of Toronto drawings from 1941 and 1951. It is unknown whether these cranes were operated with hydraulics or other fuels.	NA	80 Commissioners Street	Onsite	Metals, PHCs	pH, inorganics/ metals, PAHs, PHC, VOC, PCBs, ABNs	pH, inorganics/ metals, PAHs, PHC, VOC, PCBs, ABNs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-071	Waste Drum Storage and Potential UST - DSC (2002b) reports that they had previously observed an above ground fill pipe (potentially associated with a UST) and approximately 50 drums of used oil and paint sludges "on the northern limit" of the property during a Site visit in 1992.	28 - Gasoline and Associated Products Storage in Fixed Tanks	80 Commissioners Street	Onsite	Metals, PHCs, VOCs	None	None	No sample locations associated with APEC
APEC-072	ASTs - Two fuel ASTs were located at 80 Commissioners at the time of the DSC (2002b) site visit. One (2,270-L) was located on the exterior wall of the main building (northeast side) contained waste oil and the second (2,270-L) was located inside an area where generators are stored/serviced containing new oil. A third AST containing waste antifreeze (1,820-L) was located west of the exterior waste oil AST.	28 - Gasoline and Associated Products Storage in Fixed Tanks	80 Commissioners Street	Onsite	Metals, PHCs, BTEX, glycols	None	None	No sample locations associated with APEC
APEC-073	Former AST - DSC (2002b) reports that based on a review of a 1998 subsurface investigation, an aboveground heating oil storage tank may have historically been located in the southwestern corner of 80 Commissioners. The 1998 study advanced a test pit in this area and encountered hydrocarbon impacts, which were attributed to the oil tank. DSC (2002b) reports that the tank was not present during their site visit in 2002.	28 - Gasoline and Associated Products Storage in Fixed Tanks	80 Commissioners Street	Onsite	PHCs, PHCs, BTEX	None	None	No sample locations associated with APEC
APEC-074	AST - Golder (2014b) reports the presence of a diesel AST (without secondary containment), observed along the eastern property boundary of 130 Commissioners Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PAHs, PHCs, BTEX	None	None	No sample locations associated with APEC
APEC-075	AST - Golder (2014b) reports the presence of a diesel AST (without secondary containment), observed along the southern property boundary of 130 Commissioners Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PAHs, PHCs, BTEX	None	None	No sample locations associated with APEC

Table A2. Areas of Potential Environmental Concern within the Port Lands

Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-076	ASTs - Golder (2014b) reports the presence of two heating oil ASTs (without secondary containment), observed external to the northeast corner of the office building at 130 Commissioners Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PHCs, PHCs, BTEX	None	None	No sample locations associated with APEC
APEC-077	Potential UST - Golder (2014b) reports that a UST associated with a former pump island may have been located to the west of the Scale House at 130 Commissioners Street based on previous observations made by WESA of a fill port and vent pipe. A Site representative confirmed that gasoline was once dispensed from that area.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PHCs, BTEX, metals (lead)	None	None	No sample locations associated with APEC
APEC-078	Scrap Metal Recycling - The property at 130 Commissioners Street has been used as a scrap metal recycling facility since the 1940s. A smelting furnace was reported to have been used to burn off the coverings and insulation from cables and wires.	49 - Salvage Yard, including automobile wrecking 34 - Metal Fabrication	130 Commissioners Street	Onsite	Metals and inorganics, VOCs, PHCs, PCBs	pH, inorganics/ metals, PAHs, PHC, VOC, PCBs, ABNs	Inorganics/metals, PAHs, PHC, VOC, PCBs, SVOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-079	Former ASTs - Golder (2014b) reports that two fuel oil ASTs were formerly present along the western exterior wall of the warehouse based on a 1979 FIP.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PHCs, PAHs, BTEX	None	None	No sample locations associated with APEC
APEC-080	Former ASTs - Golder (2014b) reports that a fuel oil AST was formerly present within the southwestern corner of the warehouse (washroom/change room addition) based on a 1979 FIP.	28 - Gasoline and Associated Products Storage in Fixed Tanks	130 Commissioners Street	Onsite	PHCs, PAHs, BTEX	None	None	No sample locations associated with APEC
APEC-081	Bulk Tank Farm - A 1947 aerial shows a bulk tank farm on the east side of the mouth of the Don River at the Keating Channel. It is unknown whether these tanks are associated with the British North American Oil Company tank farm located on the west side of the Don River (as shown on the 1924 FIP), or Imperial Oil tank farm located at the Don Roadway and Villiers Street (as shown on a 1951 FIP). The tank farm is not present in an 1950 aerial image, where a factory/plant and associated buildings are now visible. Prior to 1947, this parcel appeared vacant on the 1924 FIP, and as the "Gooderham & Worts cattle sheds" from 1884 to 1913.	28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	21 Don Roadway	Onsite	PHCs, VOCs, PAHs, metals	None	None	No sample locations associated with APEC
APEC-082	Machine Shop - A machine shop is shown on a 1951 FIP associated with the Toronto Dry Dock Company and one associated with the Toronto Harbour Commissioners.	34 - Metal Fabrication	62 Villiers Street	Onsite	Metals, PHCs, VOCs, PAHs	None	None	No sample locations associated with APEC
APEC-083	Bulk Tank Farm - 1951 FIP shows five bulk ASTs covering the entire southern portion of 309 Cherry Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks 16 - Crude Oil Refining, Processing and Bulk Storage 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	309 Cherry Street	Onsite	PHCs, VOCs, PAHs, metals	PHCs, VOCs, ABNs, PCBs	pH, inorganics/ metals, PAHs, PHCs, VOCs, ABNs	Not all COCs have been captured by current or historical sampling activities. Metals not currently analyzed for in soil. All COCs analyzed for in groundwater.
APEC-084	Soap Manufacturing - It was reported that the Unilever Company operated out of a factory at 21 Don Roadway from the 1950s until 2012.	50 - Soap and Detergent Manufacturing, Processing and Bulk Storage	21 Don Roadway	Onsite	pH, SAR	None	None	No sample locations associated with APEC.
APEC-085	Rail Yard - A rail yard is present in current aerial photographs and those dating back to 1947.	46 - Rail Yards, Tracks and Spurs	Northeast corner Don River and Lake Shore Boulevard East	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.
APEC-086	Repair Garage - CRA (2010) reports that the property located at 480 Lake Shore Boulevard East is current used as an automobile repair business.	10 - Commercial Autobody Shops	480 to 520 Lakeshore Boulevard East	Onsite/ Offsite	PHCs, VOCs, metals	pH, inorganics/ metals, PAHs, PHC, VOC, PCBs, ABNs, CP, OCP	inorganics/metals, PAHs, PHC, VOC, PCBs, ABNs, CP, OCP	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-087	Oil Pipeline - A Trans-Northern Pipeline meter station is located on the east side of the Don Roadway, just north of Lakeshore Boulevard East. The status and route of the pipeline in this area is not known.	36 - Oil Production	Don Roadway, north of Lake Shore Boulevard East	Onsite	PHCs, VOCs, metals, PAHs	None	None	No sample locations associated with APEC.

Table A2. Areas of Potential Environmental Concern within the Port Lands

Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-088	Soil Remediation Facility - Harbour Remediation & Transfer Inc. occupied 97 Commissioners Street from approximately 1994 to present.	58-Waste Disposal and Waste Management 30-Importation of Fill Material of Unknown Quality	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-089	Former UST - Former UST, diesel pump and vent pipe reported by Dames & Moore (1994) to be present on the east portion of 97 Commissioners Street property, immediately south of the office building. At the time the report was written, the UST had been removed; the fuel pump was still present onsite.	28 - Gasoline and Associated Products Storage in Fixed Tanks	97 Commissioners Street	Onsite	PHCs, PAHs, BTEX	None	None	No sample locations associated with APEC.
APEC-090	Waste and Chemical Product Storage - Dames & Moore (1994) reported nine 500 gallon storage drums grouped together at 97 Commissioners Street. Three drums were rusted and empty; one was full without a label; one was half full and in good condition labelled "Texaco multigrear EP". Rusted metal pipes were stored next to the drums. The location of the drum storage area is unclear as the report text described the area to be on the east side of the property while the appended photo describes the area to be present along the west property boundary. Both areas have been included on the PCA/APEC map.	58-Waste Disposal and Waste Management	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	None	None	No sample locations associated with APEC.
APEC-091	Former ASTs/Storage Silos-Three large storage silos/ASTs were present on the southeast portion of 97 Commissioners Street; one was reported to be used as a water storage tank, the contents of the remaining two ASTs are unknown. Asphalt and concrete secondary containment berms were present around the tanks. All tanks were empty at the time of the D&M investigation.	28 - Gasoline and Associated Products Storage in Fixed Tanks	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	None	None	No sample locations associated with APEC.
APEC-092	Former ASTs/Storage Silos - Two storage silos/ASTs were present immediately south of the processing building (larger building) on 97 Commissioners Street. The contents of the two ASTs are unknown. Asphalt and concrete secondary containment berms were present around the tanks. All tanks were empty at the time of the D&M investigation.	28 - Gasoline and Associated Products Storage in Fixed Tanks	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	None	None	No sample locations associated with APEC.
APEC-093	Transformer Station - Dames and Moore (1994) reported the presence of a transformer station on the west side of the processing building at 97 Commissioners Street enclosed in a chain-link fence. Aerial photographs from the early 1970s indicated the presence of the transformer station however no date was visible on the outside transformer during the D&M site visit. It was not confirmed whether the transformer contained PCBs.	55-Transformer Manufacturing, Processing and Use	97 Commissioners Street	Onsite	PCBs, PHCs, VOCs	None	None	No sample locations associated with APEC.
APEC-094	Oil Separator - D&M (1994) reported the presence of a two stage oil separator along the north wall of the processing building (larger building). A monitoring well was discovered by D&M in this area which contained Waterra tubing covered in residual diesel oil and water removed from the well had a black oily sheen and strong hydrocarbon odour.	28 - Gasoline and Associated Products Storage in Fixed Tanks	97 Commissioners Street	Onsite	PHCs, PAHs, BTEX	None	None	No sample locations associated with APEC.
APEC-095	Former AST - Dames and Moore (1994) reported the presence of a former AST along the western boundary of 97 Commissioners Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks	97 Commissioners Street	Onsite	VOCs, PAHs, PHCs	None	None	No sample locations associated with APEC.
APEC-096	Rusted scrap metal parts and pile of metal pipes-Dames and Moore (1994) reported an area at the northwest corner of the processing building with a variety of rusted scarp metal parts and a pile of metal pipes.	49-Salvage Yard, including automobile wrecking	97 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs, PCBs	None	None	No sample locations associated with APEC.
APEC-097	Former Rail Spurs - Figure included in the Dames and Moore (1994) report shows a rail spur entering 97Commissioners along the centre western property boundary and terminating at the middle of the south property boundary. Based on current aerials of the site, the rail spurs no longer appear to be present.	46-Rail Yards, Tracks and Spurs	97 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Not all COCs have been captured by current or historical sampling activities. OC Pesticides and chlorophenols not currently analyzed for in soil or groundwater.
APEC-098	Artillery Shell Manufacturing - DSC (2000, 2009) and Golder (1991) reported that the property south of Commissioners Street were used for artillery shell manufacturing by British Forgings Limited during the First World War.	20-Explosives and Ammunition Manufacturing, Production and Bulk Storage	51, 75, 85, 99, 99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

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Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-099	Bulk Tank Farm - According to DSC (2009) 75 Commissioners (formerly 85 Commissioners before being severed) was used as a bulk fuel storage tank farm by McColl Frontenac from approximately 1949 to 1964.	28-Gasoline and Associated Products Storage in Fixed Tanks	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-100	Tractor Trailer Parking - Canadian Pacific Express used this 75 Commissioners Street for tractor trailor parking purposes (1964-1988) before it was severed from 85 Commissioners Street (DCS, 2000).	52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-101	Solid Waste Recycling Operation - DCS (2009) reported that Harkow Recycling and Aggregates operated a waste recycling facility at 75 Commissioners Street (1994-1999). According to Terrapex (2009) 75 Commissioners Street was listed from United Rentals and SP Canadian Film Production Inc. for a variety of wastes such as aromatic and aliphatic solvents, petroleum distillates, light fuels, waste oils & lubricants, crankcase oils, and paint, pigment and coating residues from 2001-2009.	58 - Waste Disposal and Waste Management	75 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-102	Heavy Equipment Rental Company - DCS (2000) reported that United Rentals, a heavy equipment rental company, leased the north portion of the 75 Commissioners Street property from 2000 to present. The portion of the site leased was to be used as an office and equipment yard used for storage maintenance and refuelling purposes.	52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems 11 - Commercial Trucking and Container Terminals	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-103	Chemical Storage - DCS (2000) reported the presence of waste materials such as waste oils, hydraulic oils, xylene, gas cylinders, paint, grease in the work bay in the northern portion of the north building present at 75 Commissioners Street during their investigation in 2000. Staining of floor surfaces (oil and grease covered an 120 m2 area) and product release stains were also noted during DCS (2000) investigation.	8 - Chemical Manufacturing, Processing and Bulk Storage 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	None	None	No sample locations associated with APEC.
APEC-104	ASTs - Noted in the Terrapex (2009) report the presence of ASTs/jerry can along the eastern boundary of 75 Commissioners.	28 - Gasoline and Associated Products Storage in Fixed Tanks	75 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-105	Tank Farm - DSC (2009) reported that the property at 85 Commissioners Street was used for bulk fuel storage tank farm by McColl Frontenac (1964-1988).	28 - Gasoline and Associated Products Storage in Fixed Tanks	85 Commissioners Street	Onsite	PHC, metals/inorganics, PAHs, VOCs, BTEX	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-106	Truck Storage - DSC (2009) reported that the fuel storage tank farm was removed from the property at 85 Commissioners Street. Both 85 and 95 Commissioners Street were subsequently used for truck storage by Canadian Pacific Express and Transport .	52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	85 and 95 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-107	Imported Fill - DSC (2009) reported the presence of a small berm of fill material along the south portion of 85 Commissioners Street.	30 - Importation of Fill Material of Unknown Quality	85 Commissioners Street	Onsite	Metals/inorganics, PAHs, PHCs	None	None	No sample locations associated with APEC.
APEC-108	Lead Paint and Piping - Terrapex (2009) reported that painted surface with suspected lead based paints or solder joints of drain piping were present onsite.	NA	85 Commissioners Street	Onsite	Metals (Lead)	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

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Port Lands, Toronto, ON

Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-109	Solid Waste Recycling Operation - DCS (2009) reported that Consolidated Fibres operated a wood and paper recycling operation on 95 Commissioners Street between 1972-1985/86. Plymouth Paper Products was also noted to be present at 95 Commissioners during this period. DCS (2009) reported the presence of various waste recycling facilities including First Canadian Recycling Ind. Ltd, Quno Recycling Corp and Donohue Recycling Inc. during the period of 1989 to 2005. Wastes noted to be present on site include waste oils and lubricants, paint, pigment, coating residues, polymeric resins, oil skimmings and sludges. Both 85 and 95 Commissioners were listed with a CoA for waste disposal transfer station under Harkow Recycling Ltd. in 1998 and 1999.	58 - Waste Disposal and Waste Management 45 - Pulp, Paper and Paperboard Manufacturing and Processing	85 and 95 Commissioners Street	Onsite	PHC, metals/inorganics, PAHs, VOCs, BTEX	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-110	Transformers - Fluorescent light fixtures, floor and wall mounted transformers were noted by Terrapex (2009) in the industrial building on 95 Commissioners Street.	55 - Transformer Manufacturing, Processing and Use	95 Commissioners Street	Onsite	PCBs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	None	Not all COCs have been captured by current or historical sampling activities. PCBs not currently analyzed for soil. No groundwater sampling completed at APEC.
APEC-111	Potential Former AST- Terrapex (2009) noted that a 1991 Golder report discussed the presence of a 2,250 L AST containing diesel fuel located in the loading dock area of 95 Commissioners Street for refuelling front end loaders. The site was listed as a private fuel outlet under Quebec and Ontario Paper Recycling Ltd.	28 - Gasoline and Associated Products Storage in Fixed Tanks	95 Commissioners Street	Onsite	PHCs, PAHs, BTEX	pH, inorganics/ metals, PAHs, PHC, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-112	Former USTs - Terrapex (2009) noted the presence of a 9,000 L UST present in the southwest corner of 95 Commissioners Street. The UST was installed in 1974 and reportedly removed in 1993. A single wall UST containing diesel fuel was reportedly installed at 95 Commissioners in 1993. Terrapex (2009) noted that it was unclear as to whether there was one or two USTs associated with 95 Commissioners Street.	28 - Gasoline and Associated Products Storage in Fixed Tanks	95 Commissioners Street	Onsite	BTEX, PHCs, PAHs, metals	None	None	No sample locations associated with APEC
APEC-113	Rail Spurs - According to Terrapex (2009), a CN rail spur line was present at the east side of the industrial building on 95 Commissioners Street.	46-Rail Yards, Tracks and Spurs	95 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.
APEC-114	Used Rubber Recycling-DSC (2009) reported that National Rubber Technologies (used rubber recycler) was present on 99 Commissioners Street from 1993 until the year the report was written in 2009.	47-Rubber Manufacturing and Processing	99 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-115	Rail Spurs - According to DCS (2009), rail tracks associated with the former British Forging operation formerly traversed the north portion of 99 Commissioners Street.	46 - Rail Yards, Tracks and Spurs	99 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.
APEC-116	Chemical Storage - DCS (2009) reported the presence of a chemical storage enclosure on 99 Commissioners Street used to contain waste materials, 4,500L diesel fuel tank (appears to be in an AST) for NRT vehicles and lubricating oils, located along the west fence line south of the main building. Stained areas were observed on the adjacent concrete refuelling pad to the east of the enclosure during the DCS (2007) investigation. The diesel AST was constructed of steel and placed within a steel containment structure which was surrounded by a low concrete containment wall. No staining due to fuel spillage was observed around the storage tank however 15 cm of fuel was present at the base of the steel containment unit.	8 - Chemical Manufacturing, Processing and Bulk Storage 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	99 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-117	Oil water separator - DSC (2009) reported that an oil water separator was present in the northcentral portion of the main building on the 99 Commissioners Street Property. Oil skimmings are pumped directly from the oi/water separator into a disposal truck.	58 - Waste Disposal and Waste Management	99 Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs	None	None	No sample locations associated with APEC.

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APEC-118	Used Rubber Manufacturing Plant - DCS (2009) reported that the main building on the 99 Commissioners Street property is used solely for the storage and recycling of used vehicle tires. The southern half of the building serves as the receiving and storage area for the tires. The northern half of the building is occupied by several tire shredding lines, product storage and a maintenance shop. Process equipment used to melt shredded tire material (crumb) was also located in the north half of the building.	47 - Rubber Manufacturing and Processing	99 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-119	Transformer Compound - DCS (2007) noted during their investigation that a transformer compound was present on the north west side of the main building on 99 Commissioners Street. DSC (2007) noted during their investigation that no equipment suspect of containing PCBs was observed as the main building was constructed 13 years after the federal ban on PCBs in new equipment.	55 - Transformer Manufacturing, Processing and Use	99 Commissioners Street	Onsite	PCBs, PHCs, VOCs	None	None	No sample locations associated with APEC.
APEC-120	Fuel and Coal Storage-DCS(2009) reported that the 99A Commissioners Street was used for coal storage by Regal Coal Co. Ltd and fuel storage by Supertest Petroleum Co. Ltd between 1949 and 1961.	52-Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems NA	99a Commissioners Street	Onsite	VOCs, BTEX, PHCs, PAHs, metals	pH, inorganics/ metals, PAHs, PHC, VOCs	pH, inorganics/ metals, PAHs, PHC, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-121	Waste Processing Activities - DCS (2009) reported that 99 Commissioners Street was used by Harkow Aggregates for waste processing activities sometime after 1978 until 1989. During Harkow's occupancy of the property, a larger sized building was located within the south western part of the site with a smaller building in the northeast part of the site.	58 - Waste Disposal and Waste Management	99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-122	Waste/Debris Piles - DSC (2009) reported that 99A Commissioners Street was vacant from approximately 1989 until the time their report was written and that numerous piles (one as high as 10 m) of brick, concrete and intermixed debris have been deposited on a majority of the site footprint, which has significantly reduced access to much of this property.	12 - Concrete, Cement and Lime Manufacturing 58 - Waste Disposal and Waste Management	99a Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs, pH	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-123	Former Tank Farm - Based on 1935 and 1951 FIPs and City Directories, Terrapex (2009) reported that the property at 225 Commissioners Street (formerly 101 Commissioners) was used as bulk fuel storage tank farm by Imperial Oil Ltd (mid 1930s-1980). 1935 FIP shows two 3,000,000 gal ASTs (oil tanks); 1953 aerial photo showed approximately 12 ASTs, 1951 FIP indicated 6 of these were 350,000-850,000 gal ASTs.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	225 Commissioners (formerly 101 Commissioners)	Onsite	PHCs, BTEX, PAHs	pH, metals/ inorganics, PAHs, PHC, VOC	pH, metals/ inorganics, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-124	Former Holding Pond - Based on a 1965 aerial photo (Terrapex, 2009), there appears to be a holding pond present in the southwest portion of 225 (formerly 101) Commissioners Street.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage 58 - Waste Disposal and Waste Management	225 Commissioners (formerly 101 Commissioners)	Onsite	PHCs, BTEX, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-125	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were present on north porton of 225 (former 101) Commissioners Street.	46 - Rail Yards, Tracks and Spurs	225 Commissioners (formerly 101 Commissioners)	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC
APEC-126	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were present south porton of 185 Villiers Street.	46 - Rail Yards, Tracks and Spurs	185 Villiers Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.
APEC-127	Former Fuel Oil Tank Farm - According to the 1951 FIP (Terrapex, 2009), Imperial Oil Ltd Bulk Plant had 6 steel ASTs ranging in size from approximately 2,000,000-3,000,000 gal on 185 Villiers Street.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	185 Villiers Street	Onsite	PHCs, BTEX, PAHs	pH, metals/ inorganics, PAHs, PHC, VOC	pH, metals/ inorganics, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

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APEC-128	Former Fuel Oil Tank Farm - According to a 1951 FIP (Terrapex, 2009) Imperial Oil Ltd has 3 former fuel oil ASTs raning from approximately 1,000,000-2,000,000 gal at 625-675 Lake Shore Boulevard.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	625-675 Lake Shore Boulevard	Onsite	PHCs, BTEX, PAHs	pH, inorganics/ metals, PAHs, PHCs, VOCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-129	Former Coal Tar Distillation - According to the 1951 FIP (Terrapex, 2009), The Barrett Co. used this property at 685 Lake Shore Boulevanrd for distilling of crude cola tar and saturating roofing felt.	9 - Coal Gasification	685 Lake Shore Boulevard	Offsite	PHCs, BTEX, PAHs, metals	None	None	No sample locations associated with APEC.
APEC-130	Rail Sidings - According to the 1951 FIPs (Terrapex, 2009) rail sidings were on the central portion of 685 Lake Shore Blvd (1951 FIP; Terrapex, 2009)	46 - Rail Yards, Tracks and Spurs	685 Lake Shore Boulevard	Offsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.
APEC-131	Former Fuel Oil AST- According to the 1953 FIP (Terrapex, 2009) 225 Commissioners street had one 4,500,000 gal fuel oil tank owned by Fuel Oil Equipment Ltd.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	225 Commisioners Street	Offsite	PHCs, BTEX, PAHs	None	None	No sample locations associated with APEC.
APEC-132	Former ASTs - According to the 1953 and 1973 FIPs (Terrapex, 2009), Sun Oil Co. had 5-6 ASTs (at least 2 appear to be upward of 2,800,000 gal gasoline tanks) on the east portion of 225 Commissioners Street immediately east of the Fuel Oil Equipment AST.	28 - Gasoline and Associated Products Storage in Fixed Tanks	225 Commisioners Street	Offsite	PHCs, BTEX, PAHs, metals (for gasoline tanks)	None	None	No sample locations associated with APEC
APEC-133	Former Coal Storage - According to the 1953 FIP in the Terrapex (2009) report, J. Frank Jones Coal Ltd. stockpiled coal at 15 and 1-17 Basin Street.	NA	15 and 1-17 Basin Street	Offsite	PAHs, metals	None	None	No sample locations associated with APEC.
APEC-134	Soil Material Stockpiles - Based on an aerial Google view of the site at 1-17 Basin Street there appears to be stock piled material along the southern portion of the property.	30 - Importation of Fill Material of Unknown Quality	1-17 Basin Street	Offsite	Metals/inorganics, PAHs, PHCs	None	None	No sample locations associated with APEC.
APEC-135	Former Fuel Oil ASTs - According to the 1953 FIP (Terrapex, 2009), Fuel Oil Equipment Ltd occupied the property at 23 and 23 R Basin Street; 2 fuel oil ASTs were present (8,500,000 gal and 845,000 gal) and an oil and greasing room appear in the 1953 FIP.	58 - Waste Disposal and Waste Management 41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	23/23 R Basin Street	Offsite	PHCs, BTEX, PAHs	None	None	No sample locations associated with APEC.
APEC-136	Soil Material Stockpiles - Based on an aerial Google view it appears that soil material is being stockpiled on the property at 101 Commissioners Street.	30 - Importation of Fill Material of Unknown Quality	101 Commissioners Street	Onsite	Metals/inorganics, PAHs, PHCs	pH, inorganics/ metals, PAHs, PHCs, VOCs	None	Current and/or historical sampling activities have captured the COCs associated with this APEC for soil. No groundwater sampling completed at APEC.
APEC-137	Former Tank Farm - According to 1951 and 1973 FIPs (Terrapex, 2009) Texaco Canada Oil Co. Ltd and McColl Frontenac Oil Co. used the majority of the block of land extending from 21 to 63 Commissioners Street (bound by Cherry Street to the west and the Shipping Channel to the south) as a tank farm. Approximately 34 ASTs were present across the site ranging in size from approximately 1600 barrels (Bbls) to more than 100,000 Bbls. Tanks contents varied across the site and included crude oil, benzol, furnace oil, gasoline, fuel oil and cycle (majority were approx. 80,000 Bbls). 28 smaller ASTs, approximately 1000 Bbls, were present in the northeast portion of the tank farm area and were noted to be blending and grease storage tanks. Texaco Canada occupied the western portion of the tank farm; McColl Frontenac occupied the eastern portion. Based on aerial photos from the Terrapex (2009) report, the tank farm was present on the property from 1947 until 1985; by 1992 many of the tanks had been removed. McColl Frontenac Oil Co. Ltd. – Oil Refinery (1925 to 1949); McColl Frontenac/Texaco – Petroleum Products Terminal, Blending, and Grease Plant (1949 to 1990); Imperial Oil (1990 to 1994). Historical reports indicate spills in the north section. LNAPL recovery program in 1990s. Full scale clean-up estimated to 310,000m^3 soil to 5.0 mbgs and 20,000 m^3 of LNAPL.	28 - Gasoline and Associated Products Storage in Fixed Tanks 41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	21-63 Commissioners Street, 185 Cherry Street	Onsite	PHCs, BTEX, PAHs, metals	pH, metals/ inorganics, PAHs, PHC, VOC	pH, metals/ inorganics, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.

Table A2. Areas of Potential Environmental Concern within the Port Lands

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Areas of Potential Environmental Concern (APEC)		PCA[a]	Location of PCA[b]		COCs (based on AP method groups2,3)	List of Parameter Groups tested (soil)	List of Parameter Groups Tested (GW)	Comments
APEC-138	Former Oil Separator - According to a 1951 FIP (Terrapex, 2009) an oil seperator was present immediately northwest of the tank farm on the former Texaco Canada lands at 21 Commissioners Street. The oil seperator was likely part of Texaco Canada operations to the immediate south.	41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs	None	None	No sample locations associated with APEC.
APEC-139	Former ASTs - According to a 1951 FIP (Terrapex, 2009) seven 500 Bbls marketing tanks were present in the northwest portion of the property at 21 Commissioners Street. Another four smaller ASTs were present immediately west of the marketing tanks, south of the garage. These tanks were likely part of the Texaco Canada operations to the immediate south.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs, metals	None	None	No sample locations associated with APEC.
APEC-140	Former Garage - According to a 1951 FIP (Terrapex, 2009) a garage was present at the northwest corner of the property at 21 Commissioners Street.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	21 Commisioners Street	Onsite	PHCs, BTEX, PAHs, metals	None	None	No sample locations associated with APEC.
APEC-141	Cabinet Manufacterer - According to a 1951 FIP (Terrapex, 2009) a building that housed Kent McClain Ltd Cabinet Manufacturing was present in the north portion of 31-39 Commissioners Street. Noted within the building were a glue department, box making, finishing room and a garage immediately west of the main building. A smaller shipping and storge area was present immediately east of the main building.	59 - Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products	31-39 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	pH, metals/ inorganics, PAHs, PHC, VOC	pH, metals/ inorganics, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-142	Blending and Grease Building, Tank House, Drum Reconditioning-shown in the 1951 FIP (Terrapex, 2009) as part of the McColl Fontenac operations at 63 Commissioners Street.	41 - Petroleum - derived Gas Refining, Manufacturing, Processing and Bulk Storage	63 Commissioners Street	Onsite	PHCs, BTEX, PAHs, metals	pH, metals/ inorganics, PAHs, PHC, VOC	pH, metals/ inorganics, PAHs, PHC, VOC	Current and/or historical sampling activities have captured the COCs associated with this APEC for both soil and groundwater.
APEC-143	Polymerization Plant - According to a 1951 FIP (Terrapex, 2009) a polymerization plant was present on the McColl Frontenac portion of the tank farm area (northwest portion) and appeared to be part of the oil processing operations part of the tank farm.	43 - Plastics (including Fibreglass) Manufacturing and Processing	5741 Commissioners Street	Onsite	VOCs, PHCs, metals/inorganics, PAHs	None	None	No sample locations associated with APEC.
APEC-144	Rail Sidings - According to the 1951 and 1973 FIPs (Terrapex, 2009) rail sidings were on the central north and south portion of the site occupied by Texaco Canada and McColl Frontenac.	46 - Rail Yards, Tracks and Spurs	33-63 Commissioners Street	Onsite	VOCs, PAHs, PHCs, metals, OC pesticides, chlorophenols	None	None	No sample locations associated with APEC.

Notes:

CrVI - hexavalent Chromium
Cu - Copper
D(ah)A - Dibenzo(ah)anthracene
EC – Electrical conductivity
F2 - PHCs (C10-C16 Fraction)
F3 - PHCs (C16-C34 Fraction)
F4 - PHCs (>C34 Fraction)
Hg - Mercury
MeCl- - Methylene Chloride
MeHg - Methyl Mercury
Mo - Molybdenum
PAHs – Polycyclic aromatic hydrocarbons
PCA – Potentially contaminating activity
PCE - Tetrachloroethylene
Pb - Lead
PCBs – Polychlorinated biphenyls
PHCs – Petroleum hydrocarbons
Sb - Antimony
Se - Selenium
TCE - Trichloroethylene
UST – Underground Storage Tank
VC - Vinyl Chloride
VOCs – Volatile organic compounds
Zn - Zinc

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Report Title	Date	Author	Prepared for	Description
Preliminary Environmental Site Assessment, Quebec and Ontario Paper Company, Toronto Recycling Centre, Toronto, Ontario	May 1991	Golder Associates Ltd.	Blake, Cassels & Graydon	Investigation comprised of a site inspection, interview with site operations personnel, MOE file and historical air photo review and an intrusive investigation to determine presence and range of impacted materials across the site. A total of 8 boreholes and 3 monitoring wells were installed. Soil and groundwater samples were collected and submitted for laboratory analysis. The report noted that the most significant environmental concern was related to the gasoline UST which has the potential for onsite and offsite impacts. Other impacts noted include elevated metals (lead and arsenic), oil and grease, TOC, manganese, benzene and phenolics concentrations.
Environmental Investigation for the Toronto Harbour Commissioners, 85 Commissioners Street, Toronto, Ontario	March 27, 1992	Proctor & Redfern Limited	Toronto Harbour Commissioners	Proctor & Redfern Limited were retained by the THC to conduct additional sampling and analysis to more fully document the soil characteristics at 85 Commissioners Street. 28 test pits were excavated, 16 of which were near locations sampled in a previous sampling program and 12 "new" locations to provide adequate site coverage. Samples were taken of the fill material to groundwater depth. Most samples were analyzed for BTEX, samples from the "new" locations were analyzed for oil and grease and the selected heavy metals consisting of copper, chromium, cadmium and lead; six samples were analyzed for PAH as a result of field observations. Based on the investigation results Proctor and Redfern developed a variety of scenarios for redevelopment of the proposed Harkow site with a total cost of $870,000 with the most significant cost, being that of engineered fill, is based on obtaining fill material from commercial sources.
Phase II Environmental Assessment- 105-165 Villiers Street and 150 Commissioners Street, Toronto, Ontario	July 1992	Golder Associates Ltd.	CP Express and Transport	Phase II ESA comprised of the following investigative techniques: (i) ground surface electromagnetic geophysics; (ii) soil vapour survey and (iii) additional monitoring wells for further characterization of soil and groundwater. The geophysics survey identified a number of buried objects such as fuel tanks/drums, utility lines and old foundations. The shallow soil vapour survey was used to delineate areas of gross petroleum/solvent impacts and locate addition boreholes. Data collected suggests site has been moderately impacted by organic compounds. Floating product was measured in one monitoring well.
Phase I Environmental Assessment- 105-165 Villiers Street and 150 Commissioners Street, Toronto, Ontario	July 1992	Golder Associates Ltd.	CP Express and Transport	Phase I ESA comprised a site history review and borehole drilling program. Thirteen (13) boreholes were drilled and sampled across the site. Monitoring wells were installed in each borehole; one deep monitoring well was installed, no groundwater samples were collected as part of the investigation. Hydrocarbon and chemical/solvent odours and impacts were noted at various locations across the site.
Draft-Environmental Site Preparation, Proposed Harkow Facility, 85 Commissioners Street	March 1993	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	Outlines the remedial program developed on the basis of findings and recommendations in the DSC Decommissioning Plan report dated December 4, 1992. The report proposed to proceed with a remedial option involving the selective removal of contaminated soil and/or treatment to reduce the concentration of inorganic and organic parameters in the soil to a level meeting the requirements of the Harkow Certificate of Approval for a waste management site. It was also proposed that NAPLs be removed from the groundwater surface as part of the site remediation program.

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Report Title	Date	Author	Prepared for	Description
Baseline Environmental Assessment, 97 Commissioners Street, Toronto, Ontario	August 5, 1994	Dames and Moore, Canada	Harbour Remediation and Transfer Inc.	A baseline environmental assessment was conducted by Dames and Moore to assess current conditions on-site prior the treatment of contaminated soils by Harbour Remediation and Transfer Inc. Three boreholes (BH1-BH3) were drilled on April 15, 1994 and all were installed as monitoring wells. Two existing monitoring wells were also present onsite (BH4 and BH5) during the investigation. Groundwater removed from BH5 had a black oily sheen and strong hydrocarbon odour. Soil and groundwater samples were submitted for laboratory analysis; soil results were compared to the CCME Remediation Criteria for Soils (1991) and the MOEE Guidelines for Decommissioning and Clean-up of Sites in Ontario (1989); groundwater results were compared to the CCME Interim Remediation Criteria for Water (1991) and the MOEE Ontario Drinking Water Objectives (1992). The following conclusions were reached during the assessment: • Diesel UST which was removed contributed to onsite contamination; a two stage oil separator may also have impacted the site. • Elevated metals and inorganic concentrations were found across the site in both soil and groundwater. Regular sampling of existing monitoring wells across the site was recommended.
Risk Assessment for the Proposed Redevelped Form of the Harkow Recycling Facility, 85 Commissioners Street, Toronto, Ontario	March 1995	Angus Environmental Limited	City of Toronto Economic Development Corporation	Risk Assessment undertaken to estimate the potential health effects that future tenants of users of the site might realize after remediation and redevelopment. Generally it was found that the proposed redevelopment will not result in unacceptable exposures and as a result human health concerns should not be a cause for altering the proposed design of the facility.
Supplementary Phase III Work at 105-165 Villiers Street and 150 Commissioner's Street , Toronto, Ontario	August 14, 1995	ADAMAS Environmental Inc.	CP Rail System	Supplementary Phase III included excavation of thirty-two (32) test pits, drilling of five boreholes, and laboratory analysis of soil and groundwater samples. Seventeen (17) petroleum storage tanks found to be present and require removal. Approximately 39,150 m^3 soil were identified for remediation or removal from the soil so that remaining soil meets relevant criteria. Groundwater concentrations of pyrene found to exceed relevant criteria. VOC contamination measured in wells on and surrounding 165 Villiers Street. LNAPL and DNAPL contamination identified. Offsite migration of contaminants northward and southward was observed. Possible soil and groundwater remedial measures identified.
Underground Storage Tank Removals- 105-165 Villiers/ 150 Commissioners, Toronto, Ontario	March 1998	Decommissioning Consulting Services Limited	Canadian Pacific Limited	Eight USTs and one oil/water interceptor were removed from the 105-165 Villiers/150 Commissioners site. Remediation criteria was to remove any grossly contaminated soil in the excavation. One excavation location has total xylene concentrations in excess of the MOE Table B criteria.
Pre-lease Commencement Audit, 75 Commissioners Street, Toronto, Ontario	December 2000	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	The facility inspection and site investigation work that that was completed as part of the audit, was carried out to identify the presence of waste or other concerns within the portion of the building to be leased by United Rentals, as well as establish baseline subsurface conditions for future comparison with the findings of a termination audit at the end of the lease to permit a determination to be made of the

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				contribution to overall environmental liabilities at the site, if any, caused during the new tenant's occupancy. The subsurface investigation was comprised of the advancement of five boreholes (BH1 –BH5), two of which were installed as monitoring wells. Soil samples were collected and analyzed for metals, anions, TPH, VOCs, PAH and PCBs. Groundwater samples were analyzed for metals, anions, pH, VOCs and TPH. The investigation was carried out to confirm the presence of historical petroleum hydrocarbon contamination in soil at levels exceeding the MOE Table B industrial/commercial criteria across of the site. Inorganic impacts consisting of arsenic, cadmium and boron were also found at shallower depths in localized areas in the northeastern portion of the site at levels marginally above their respective guidelines. The presence of asphalt pavement over the affected areas provides all necessary exposure protection in this regard. No groundwater impacts were identified during the course of the investigation that exceeded the MOE Table B Standards.
Commencement Audit, 80 Commissioners Street, Toronto, Ontario	November 2002	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	A site inspection and facility evaluation that consisted of an audit was carried out to identify the presence of waste or other concerns on the subject property, which was to be leased by PS Production Services Ltd. (subtenant and occupant of the site), as well as establish baseline conditions for future comparison with the findings of a termination audit at the end of the lease to permit a determination to be made with respect to the contribution to overall environmental liabilities at the site, if any, caused during PS Production's occupancy of the site as the primary tenant. The assessment of facility conditions identified a number of issues which have either had a direct impact on the site or pose potential regulatory compliance issues with respect to handling and disposal including designated substances, PCBs, CFCs and asbestos. ASTs and USTs were also identified onsite. Based upon the subsurface contaminants confirmed to exist on the site (inorganics, PAHs, heavy oil), it was not considered that any requirement exists to proceed with any form of soil cleanup from a human health and safety or ecological perspective. It was recommended that removal and disposal of contaminated soil be considered if building or infrastructure expansion plans were to be implemented in the future to manage soil that is excavated from affected areas.
Phase I Environmental Site Assessment- Knob Hill Farms Lease 222 Cherry Street, Toronto, Ontario	October 31, 2002	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	Phase I ESA investigating the condition of the property and potential for the presence of environmental liabilities that may be attributable to actual use of the tenants, Knob Hill Farms. Potential environmental issues associated with the past use on and adjacent to the noted property include: • metals and PAH from historic coal storage; • PCB contamination from a row of transformers; • PHC from fuel oil leak from a UST on the adjacent Canada Cement property; and, It is considered likely that some subsurface environmental liability issues may have accrued during the term of Sevendon/ Knob Hill lease including inorganic contaminants in near-surface soil and PHC contamination in near-surface soil. It is suspected

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				that fluorescent ballast present within the building may contain PCBs, based on the building construction date.
Phase II Environmental Site Assessment- 222 Cherry Street	February 2003	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	Phase II ESA completed at 222 Cherry Street consisted of completion of five (5) boreholes to assess subsurface soil conditions, including completion of one (1) borehole as a monitoring well to assess Phase I findings with included coal fuel stockpiles and storage, a former transformer location, USTs and stained areas. Soil samples were submitted for laboratory analysis for metals, light fuels, heavy oil total petroleum hydrocarbons, PCBs, PAHs and BTEX. Groundwater samples were submitted for laboratory analysis of metals, PAHs, TPH and BTEX. Samples were compared against the applicable MOE Table B Soil and Groundwater Standards. Elevated electrical conductivity was observed in shallow fill soils at three locations. Elevated arsenic concentrations were found in soil at one location. No groundwater exceedances were reported.
Site Characterization Update-Former CP Express Transport Site	November 2006	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	Undertaken in support of the Purchase and Sale agreement between TEDCO and Canadian Pacific Express and Transport (CPET) for 150 Commissioners Street and 155 Villiers Street and related to the Lease Termination for 105 and 165 Villiers. No major environmental issues were identified that would add significantly to the soil and groundwater previously identified on the CPET site and would not materially affect the cost of redevelopment of the site.
Supplementary ESA-CPET Lands Purchase & Lease Termination, 150 Commissioners Street and 105 to 165 Villiers Street, Toronto, Ontario	October 5, 2006	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	Agreement made by Fairmont for TEDCO to acquire the former CPET lands at 150 Commissioners Street and 155 Villiers Street in the Toronto Port Lands. Review of information confirms no significant issues over and above those that had already been identified. Proposal to conduct a supplementary investigation was included which was comprised of drilling six boreholes, installation of 3 monitoring wells. Information will be used to address the presence of previously unidentified environmental liabilities that would changes the transaction to TEDCO.
Draft Termination Audit, 99 Commissioners Street, Toronto, Ontario	February 2007	Decommissioning Consulting Services Limited	The City of Toronto Economic Development Corporation	Investigation completed as part of the Termination Audit for the property at 99 Commissioners Street to inspect and evaluate existing site conditions for the purpose of assessing the impact of the current tenant activities on the quality and condition of the existing facilities, as well as on soil and groundwater quality. The data review identified evidence of mainly VOC and hydrocarbon contamination on site likely associated with the former presence of the British Forging and operation and adjacent former fuel storage facilities. No significant issues were identified in association with the use of the property by National Rubber Inc. since 1993. Information regarding a diesel spill and staining concerns were noted; DCS recommended a limited Phase II investigation be undertaken.
Supplementary Soil Investigation, 99 Commissioners Street, Toronto, Ontario	May 2007	Decommissioning Consulting Services Limited	The City of Toronto Economic Development Corporation	DCS installed two boreholes (BH-1 and, BH-2) to investigate the presence and significance of petroleum hydrocarbon contamination in soil underlying a stained concrete vehicle refueling pad. The laboratory analysis reported no detectable concentrations of PHCs.

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Report Title	Date	Author	Prepared for	Description
Factual Report-Supplemental Phase II Environmental Site Assessment-105 Villiers Street	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	Supplemental Phase II ESA completed for 105 Villiers Street. The environmental soil quality information was summarized as follows: • Fill quality information collected historically by others has noted concentrations of volatile organic compound (VOC) including chlorinated hydrocarbon, PAH and PHC parameters that were greater than historical MOE commercial/industrial and residential/parkland guidelines. • Fill quality information collected by CH2M during the 2005 investigation has identified heavy metal, volatile organic compound (xylenes), PAH and CCME PHC Fractions parameter concentrations above MOE Table 3 residential/parkland standards. The environmental groundwater quality information was summarized as follows: • Groundwater quality information collected by others during previous site work notes concentrations of volatile organic compound (benzene) and PAH parameters which are greater than historical MOE non-potable water guidelines. • Groundwater quality information collected by CH2M during the 2005 investigation has identified heavy metal (mercury) and PAH parameter concentrations greater than current MOE generic non-potable groundwater quality standards. In addition, elevated CCME PHC fractions concentrations were reported although at the time of the investigation there were no CCME PHC MOE Table 3 standards for these fractions for a non-potable water condition.
Factual Report-Supplemental Phase II Environmental Site Assessment-165 Villiers Street, Toronto, Ontario	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	The supplemental Phase II ESA environmental soil quality information for 165 Villiers Street can be summarized as follows: • Fill quality information collected historically by others has noted concentrations of VOC, BTEX and chlorinated hydrocarbon parameters, and PHC parameters that were greater than historical, applicable MOE commercial/ industrial and residential/parkland guidelines. • Fill quality information collected by CH2M HILL during the 2005 investigation has identified heavy metal (boron), volatile organic compound (toluene and total xylenes), and CCME PHC Fractions parameter concentrations above MOE Table 3 residential/parkland standards. The supplemental Phase II ESA environmental groundwater quality information for 165 Villiers Street can be summarized as follows: • Groundwater quality information collected by others during previous site work notes concentrations of VOC parameters, BTEX and chlorinated hydrocarbons, which are greater than historical MOE non-potable water guidelines. • Groundwater quality information collected by CH2M during the 2005 investigation has identified heavy metal (mercury), VOC (cis-1,2 Dichloroethylene, Toluene, Xylene and Vinyl Chloride), and PAH parameter concentrations greater than current MOE generic non-potable groundwater quality standards. • The 2005 investigation confirmed the presence of a 5 mm thick petroleum-like product layer on the groundwater surface at the monitoring well BH-167 location.

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Report Title	Date	Author	Prepared for	Description
Factual Report-Supplemental Phase II Environmental Site Assessment-155 Villiers Street	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	The supplemental Phase II ESA environmental soil quality information for 155 Villiers Street can be summarized as follows: • Fill quality information collected historically by others has noted concentrations of VOC, and PHC parameters that were greater than historical, applicable MOE residential/parkland guidelines. • Fill quality information collected by CH2M during the 2005 investigation has identified heavy metal, VOCs, and PHC parameter concentrations above MOE Table 3 residential/parkland standards. The supplemental Phase II ESA environmental groundwater quality information for 155 Villiers Street can be summarized as follows: • Groundwater quality information collected by others during previous site work notes concentrations of volatile organic compound (toluene and xylenes) parameters that are greater than historical MOE non-potable water guidelines. • Groundwater quality information collected by CH2M during the 2005 investigation has identified heavy metal (mercury) and VOC (xylene) parameter concentrations greater than current MOE generic non-potable groundwater quality standards. Elevated CCME PHC fraction concentrations were also encountered; however, there are currently no non-potable groundwater standards for these fractions. The 2005 investigation also confirmed the presence of a 193-mm thick petroleum-like product layer on the groundwater surface approximately 15 metres north of historical test pit TP18 at the BH/MW 159 location. A 50 mm thick petroleum-like product layer on the groundwater surface was also encountered at the BH/MW 163 location along the east property boundary.
Factual Report-Supplemental Phase II Environmental Site Assessment-150 Commissioners Street	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	For this investigation CH2M supervised the installation of six (6) boreholes and four (4) borehole/groundwater monitoring wells at the site. A total of thirty-three (33) soil samples from nine (9) boreholes/monitoring well locations were submitted for laboratory analysis from various depths collected at the Site. In general, soil samples were submitted to analyze for the following chemical parameters: Volatile Organic Compounds (VOCs), Canadian Council of Ministers of the Environment Petroleum Hydrocarbon Fractions (CCME PHC Fractions), Polycyclic Aromatic Hydrocarbons (PAHs) and Heavy Metals (Metals, including Arsenic (As), Zinc (Zn) and Mercury (Hg)). A total of three (3) groundwater monitoring wells were sampled. Groundwater samples were submitted for laboratory analysis of VOCs, CCME PHC Fractions, PAHs and Metals. MOE Table 3 parkland/residential/institutional property use standards for a coarse grain - textured soil (where specified) in a non-potable groundwater condition were used for comparison with the results of chemical analysis on selected soil and groundwater samples. The supplemental Phase II ESA environmental soil quality information for 150 Commissioners Street summarized as follows: • Fill quality information collected historically by others has noted concentrations of heavy metal, volatile organic compound (VOC)

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Report Title	Date	Author	Prepared for	Description
				polycyclic aromatic hydrocarbon (PAH) and petroleum hydrocarbon (PHC) parameters that are greater than current provincial generic commercial/industrial land use standards. • Fill quality information collected by CH2M during the 2005 supplemental Phase II investigation has identified heavy metal and PHC parameter concentrations that are greater than current provincial generic residential/parkland land use standards. At depths greater than 0.6 mbgs, black staining and hydrocarbon-like odours were noted in the soil samples collected from BH-173, BH-169, and BH-170 location. The supplemental Phase II ESA environmental groundwater quality information for 150 Commissioners Street summarized as follows: • Groundwater quality information collected by others during previous site work notes concentrations of VOCs and PAH parameters that are greater than current provincial generic non-potable groundwater standards. • Groundwater quality information collected by CH2M during the 2005 investigation identified only one heavy metal (mercury) parameter concentration at one groundwater sample location greater than current MOE generic non-potable groundwater quality standards. Elevated CCME PHC F2 and F3 fraction concentrations were also found at this same well location. No phase-separated hydrocarbons were detected in the four monitoring wells installed by CH2M.
Final Factual Report-Soil and Groundwater Investigation-10 Munition Street	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	Investigation comprised the completion of one (1) monitoring well installed at 10 Munition Street near 309 Cherry Street. In general, soil and groundwater samples were collected for PHC, VOC, PAH, and metals analysis. PHC F1 concentrations in soil exceeded the MOE Table 3 standard. The PHC F2, F3 and F4 concentrations met the standard. No VOC or PAH parameters were reported to be present in soil at concentrations exceeding the MOE Table 3 standards. All PHC fractions (F1-F4) were detected in the sample taken from the well, with the highest concentration detected (38, 000 µg/L) present in the F2 range. PAH, VOCs and metals concentrations did not exceed the MOE Table 3 Standards.
Final Factual Report-Phase II Environmental Site Assessment-309 Cherry Street ROWs, 54 Commissioners Street	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	Phase II ESA completed for the roadways (rights-of-way) surrounding 309 Cherry Street and at 54 Commissioners Street. Sewer sampling and inspections were completed. The property of interest was 309 Cherry Street, however access to the site was not obtained at the time of this ESA. Drilling locations were established in the roadways of Cherry, Commissioners Villiers and Munition Streets, and at the adjacent property at 54 Commissioners Street. Several large waste oil storage tanks of unknown age and condition were present at 309 Cherry Street. The report indicates that improper waste disposal practices have been documented in the past at the site, including disposal of wastes into sewers. Twelve monitoring wells were installed, including three at 54 Commissioners Street. Soil and groundwater samples were collected for PHC, PCB and PAH analysis. At 54 Commissioners Street soil were reported to be impacted by PHC F1 and F2, BTEX and PAH. At 309 Cherry Street ROW soil was reported to be impacted by PHC F1, F2 and/or F3. Sheen was observed on well purge water at a number of monitoring wells which as per the requirements of the O. Reg.

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				153/04 Standards would not meet the applicable site condition standard in relation to a petroleum hydrocarbon given the presence of visible petroleum hydrocarbon film or sheen in the ground water at the selected wells.
Final Factual Report, Soil and Groundwater Investigation- 281 Cherry Street, Toronto, Ontario	April 2008	CH2M HILL Canada Limited	Toronto Waterfront Revitalization Corporation	This factual report presents subsurface information gained as a result of an earlier investigation carried out for TWRC by Toronto Waterfront Joint Venture. One monitoring well was installed at the 281 Cherry Street site, southeast of a former transformer sub-station. Soil and groundwater samples were collected for PHC, VOC, PCBs, and PAH analysis. The laboratory analytical results for soil indicated that the PHC, VOC, and PAH concentrations met the MOE Table 3 standards at MW 13. PCBs were not detected in soil. The laboratory did not detect any PHC (F1- F4) parameters in the groundwater sample. The laboratory analytical results indicated that the groundwater VOC and PAH concentrations met the MOE Table 3 Standards.
Subsurface Investigation in Support of the Environmental Assessment for the Port Lands Flood Protection and Enabling Infrastructure Project	October 5, 2009	SLR Consulting (Canada) Ltd.	Toronto and Region Conservation Authority	The SLR investigation consisted of a utility location survey, the drilling of sixty-eight (68) boreholes with forty-six (46) completed as monitoring wells, the collection of soil and groundwater samples for environmental laboratory analysis, and the collection of geotechnical data. Metals and inorganics impacts in soil and/or groundwater above the MOE Table 1 or 3 Standards determined to be applicable across the site. Polycyclic Aromatic Hydrocarbon (PAH) soil and/or groundwater impacts above the MOE Table 1 or 3 MOE Standards determined to be applicable were identified across the site. PHC soil impacts above the MOE Table 3 Standards determined to be applicable were identified across the site. Volatile Organic Compound (VOC) soil and/or groundwater impacts above the MOE Table 1 or 3 Standards determined to be applicable were identified across the site. Soil and groundwater impacts were identified across the Site possibly as a result of impacted fill being placed at the Site or from the various historical industrial uses of the Site. The most significant impacts were identified at and down gradient of the portion of land that includes 21-63 Commissioners Street and 186 Cherry Street. SLR identified LNAPL in monitoring wells BH144, BH147, BH148 and BH150 ranging from 0.01 to 0.30 metres in thickness. These impacts were likely the result of the historical use of this Site for petroleum refining, storage and distribution.
Environmental Subsurface Characterization, PortLands Sports Complex, 85, 95, 99, 99A Commissioners Street, Toronto, Ontario	November 9, 2009	Decommissioning Consulting Services Limited	City of Toronto Economic Development Corporation	DCS completed a joint geotechnical/environmental subsurface investigation of TEDCO-owned land comprising four properties located at 85, 95, 99 and 99A Commissioners Street in the Port Lands Industrial District (PIA) of the City of Toronto. Consideration was being given to the use of the properties for the construction of a sports complex. Nine boreholes (DCS BH09-1 to 9) were installed to investigate the subsurface conditions with two being completed as monitoring wells (BH09-1 and 2). Soil concentrations at 85 and 95 Commissioners exceeded the Table 3 ICC Standards for boron, PAHs, and PHC F2-F4, At 99/99A Commissioners metals, EC, SAR, PAHs and PHCs

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				exceeded the Table 3 RPI Standards. Marginal exceedances for PAHs were found in groundwater.
Draft Phase I Environmental Site Assessment, 85-95 Commissioners Street, Toronto, Ontario	December 22, 2009	Terrapex Environmental Ltd.	Toronto Port Lands Company	A Phase I ESA was completed which identifyed actual and potential sources of contamination on the properties associated with 85-95 Commissioners Street. Several areas of potential and actual contamination were noted as follows: • Presence of various industrial facilities across the site including Supertest Petroleum, artillery shell manufactures, steel companies, and recycling facilities • Waste generators for a variety of wastes including waste oils, lubricants, paint, pigment, etc. were registered at the site and adjacent sites. • Private fuel outlet and the presence of USTs • Potential free phase observed in a manhole. • Potentially contaminating activities taking place at neighboring properties that could impact the site. Further sampling was recommended to determine presence of actual environmental concerns at the site.
Phase II Environmental Site Assessment- 281 Cherry Street, Toronto, Ontario	April 2011	Occupational Hygiene and Environment	Toronto Hydro-Electric System Limited	Phase II ESA characterizing subsurface environmental conditions and the collection and submission of soil and ground water samples for laboratory analysis, for the former electrical transformer station located at 281 Cherry Street in Toronto, Ontario. A total of ten (10) boreholes were advanced to depths ranging from approximately 1.2 m (BH8) to 4.9 m below grade. Four (4) of the boreholes were completed as ground water monitoring wells. Eleven (11) soil samples and four (4) ground water samples were collected from the site and submitted for laboratory analysis of benzene, toluene, ethyl benzene and xylenes (BTEX), volatile organic compounds (VOCs), petroleum hydrocarbons (PHC, Fl to F4 fractions), polychlorinated biphenyls (PCBs) and/or selected metals. PHC (F2) concentrations in soil exceeding the applicable MOE Table 3 Standards were observed at borehole location BH7 in the north eastern portion of the Property inside the building. Elevated PHC concentrations in the F1-F3 range were detected in ground water sampled from MW4. However, no derived values existed at the time the report was written for comparative purposes against the applicable table Standards. Review of the analytical results for this ground water sample indicated that concentrations of VOCs, PHCs (F1-F4), PCBs and/or selected metals were below the applicable Table 3 Standards. Based on the calculated ground water direction of flow, from North to South, OHE noted that there was potential for off-site impacts from the neighbouring properties. OHE recommended the development of a remedial plan with additional delineation of the identified soil exceedences and additional investigation into potential soil and groundwater impacts to and/or from offsite properties based on their findings.
Groundwater Monitoring Event - Spring 2011,	July 6, 2011	Conestoga-Rovers & Associates	Toronto Port Lands Company	A previous monitoring well (BH-1) installed by DCS in 2000 was sampled as part of this investigation. All analyzed parameters were detected in the groundwater at

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75 Commissioners Street, Toronto, Ontario				concentrations below the applicable MOE Table 3 (non-potable) standards and no evidence of LNAPL or DNAPL was found. No evidence of free phase product was encountered during the well development and sampling activities.
Draft- Limited Environmental Testing and Hazardous Materials Survey-281 Cherry Street	August 31, 2012	Golder Associates Ltd.	Toronto Port Lands Company	Evaluated groundwater conditions at 281 Cherry Street, and included collection of an indoor ambient-air sample from the Site building and included completion of a limited, non-intrusive survey of the Site for hazardous material/designated substances prior to the execution of a Purchase and Sale agreement. Four (4) existing onsite MWs were resampled, a 24-hour indoor air sample was collected and a hazardous materials survey was completed. Exceedances of the MOE Table 3 Standards were observed at one monitoring well location for PHC F2 and F3. Air monitoring results found that no concentrations in excess of the provided criteria were present.
2013 Soil Biopile Sampling Summary Report-Villiers Street Biopile Area	July 5, 2013	Stantec Consulting Ltd.	Toronto Port Lands Company	Stantec Consulting Ltd. (Stantec) prepared this report for the Toronto Port Lands Company to document the soil sampling activities at 150 Commissioners Street in Toronto, Ontario. The site, located at the southeast corner of Villiers Street and the Don Roadway contained approximately 31,750 cubic metres (63,500 tonnes) of petroleum-impacted soil undergoing bioremediation in a series of windrow stockpiles. Sampling was restricted to the north portion of the site, where approximately 11,000 cubic metres of soil cover approximately 50% of the site area. Soils at the site were primarily impacted by petroleum hydrocarbon (PHC) fractions 2 and 3 (F2 and F3) exceeding the Ontario Table 3 Site Condition Standard for an industrial/commercial/ community property use. The 40% remainder of soil stockpiles required additional time for bioremediation to occur. The following summarizes the methodology of the soil sampling program: • Based on an approximate volume of 11,000 cubic metres, the soil piles were divided into 160 cubic metre sections and a discrete soil sample was collected by hand augering and/or digging to a depth of approximately 0.3 m below the biopile surface. • A discrete soil sample recovered from each 160 cubic metre section was submitted to Maxxam Analytics Inc. (Maxxam) for analysis of one or more of the following chemical parameters: PHC F1 to F4, BTEX, VOCs, selected metals and inorganics, and/or PCBs. Soil quality of the 11,000 cubic metres of biopile windrows included: • Approximately 8,000 cubic metres of soil met the Ontario Table 3 SCS for ICC land uses for the parameters tested. • Approximately 5,600 cubic metres of soil met the Ontario Table 3 SCS for RPI land use for the parameters. • Approximately 8,000 cubic metres of soil met the Ontario Table 2 SCS for an ICC land uses for the parameters tested. • Approximately 5,440 cubic metres of soil met the Ontario Table 2 SCS for RPI land uses for the parameters tested. • None of the soil met the Ontario Table 1 SCS.

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Quality Control of Quality Assurance Report - imported Shale: 101 Commissioners Street and 1 & 17 Basin Street. Toronto, Ontario	September 9, 2013	SPL Consultants Limited	Toronto Waterfront Studios Development Inc.	SPL was retained by TWSD to evaluate the requirements under O.Reg. 153/04 as amended, for shale importation to a Record of Site Condition property in accordance with the CPU attached to the receiving property. The receiving property (herein referred to as the "receiving site") is 101 Commissioners Street, and 1 & 17 Basin Street in the City of Toronto. SPL's scope of work for this project included the following: 1. Development of a Soil Management Plan (SMP); 2. Monitoring of Receiving Site in accordance with the CPU and SMP; 3. Review of Contractor's importation documentation; 4. Collection and submission of shale samples for analysis to determine importation suitability; and 5. Generation of a confirmation and verification report. SPL concluded the following: 1. One hundred and forty one (141) samples were submitted for analysis and met the Table 1 Standards which supports the importation of 38,000 m3 of shale to the receiving site. GFL records indicate that a total of 37,260 m^3 of shale was imported from the source site to the receiving site. 2. Placement of a minimum of 0.15 m of crushed concrete was completed (per the SMP and CPU). As crushed concrete is a non-soil treatment, analysis of this material was not conducted. Crushed concrete was imported on July 5, 8, 10, Lt and 12, 2013. A total of 292 loads of crushed concrete were imported to the receiving site. 3. Following placement of the crushed concrete a topographic survey was completed to allow an accurate cross section of the cap thicknesses to meet the requirements of the CPU.
Phase One Environmental Site Assessment, 312 Cherry Street, Toronto, Ontario	November 2013	Golder Associates Ltd.	Essroc Italcementi Group	Phase One ESA completed in accordance with O.Reg. 153/04 conducted as part of the extended lease agreement for the Phase One Property at 312 Cherry Street. The following APECs were identified: APEC 1: The historic and/or current presence of fill material on Site. APEC 2: The western portion of the Site was used historically for the storage of cement tankers. Trimac reportedly had an AST at the Site that was used for refuelling, but no AST was present at the time of the Site visit. APEC 3: Evidence of historic rail spurs that traversed the Site from east to west across the central portion of the Site and along the northern and southern property boundaries were observed. APEC 4: A pad-mounted transformer, constructed in 1957, was observed on Site. APEC 5: Ship docking areas may have been used historically by Century Coal between the 1930s to 1950s. APEC 6: An off-Site waste disposal facility approximately 20 m east of the Site (309 Cherry Street) was used historically as a gasoline service station and petroleum bulk storage site.

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Final- Phase II Environmental Site Assessment, 312 Cherry Street, Toronto, Ontario	April 2014	Conestoga-Rovers & Associates	Toronto Port Lands Company	Phase II Environmental Site Assessment of the property located at 312 Cherry Street, Toronto, Ontario conducted between January 31 and February 12, 2014 in general accordance with the document entitled, "CSA Standard Z769-00, Phase II Environmental Site Assessment" for conducting environmental site assessments. The objective was to investigate the general soil and groundwater quality at the Site to document environmental conditions at the time of the termination of the lease. The work is being done as part of an environmental exit audit prior to Essroc Italcementi Group leaving the site. Three monitoring wells and 2 boreholes were advanced (MW1-14, MW5-14 MW6-14, BH2-13, and BH3-14) during the investigation. The fill was comprised of various amounts of rock fragments, gravel, sand, clay, and silt, some of which had wood debris, PHC-like staining, or orange staining. All soil samples had either PHC F1 to F4, PAHs, metals and/or VOCs concentrations that were above the MOE Table 9 Standard. The soil exceedances were associated with the fill material at the Site and are sporadic in nature. All parameters sampled in groundwater, where detected, were less than the MOE Table 9 Standards with exception of anthracene at MW1-14.
Annual Report - Area-Wide Initiative Groundwater Monitoring And Sampling Results - 2013	June 2014	Decommissioning Consulting Services Limited	Toronto Port Lands Company	DSC carried out environmental groundwater monitoring activities in the Port Lands as part of an ongoing Area-Wide Initiative (AWI) which comprised groundwater level monitoring, free product survey and groundwater sampling. Information was collected from 38 monitoring wells in July 2013 and 20 monitoring wells in October 2013. The groundwater samples were analyzed for general chemistry and inorganic parameters including metals, volatile organic compounds (VOCs), petroleum hydrocarbons (PHCs) and polycyclic aromatic hydrocarbons (PAHs). Investigation data were compared against the AWI trigger values and the MOE Table 3 and Table 9 SCS as applicable. Free product (NAPL) was observed in MW-4B in July 2013 sampling event in a thickness of less than 2 mm. No evidence of free product (NAPL) was observed in any of the monitoring wells in October 2013 sampling event. Sheen was observed in purged water recovered from MW11-6 and MW-100B during the July 2013 sampling event and from MW11-6 during the October 2013 sampling event. Concentrations of inorganic parameters in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 Standards for sodium at MW-24A and MW-24B, chloride at MW-24A and MW-24B and zinc at MW11-1. Concentrations of PHCs in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 Standards for predominantly F1 and F2 fraction PHCs at monitoring wells MW-14, MW11-6, MW11-7, MW-4A, MW-4B, MW-100A, MW-100B, MW-0707, MW-12A, MW-12B, MW-13A, and MW-13B. Concentrations of VOCs in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 Standards for benzene at monitoring wells at MW-4A, MW11-6 and MW11-7 and vinyl chloride and trans-1,2-dichloroethene at MW11-5. Concentrations of PAHs in groundwater samples collected in the July 2013 and October 2013 sampling events all met the MOE Table 3 or Table 9 Site SCS at all groundwater monitoring wells with exception of anthracene at MW-100A, MW11-6 and

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				MW11-7, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene at MW11-6 and MW-101B and benzo(a)pyrene and chrysene at MW11-6.
Final-Phase I Environmental Site Assessment, 54 Commissioners Street, Toronto, Ontario	November 6, 2014	Golder Associates Ltd.	Waterfront Toronto	Phase I ESA completed for the property located at 54 Commissioners Street. Based on information obtained and reviewed as part of this report the following APECs were identified to be associated with the subject property: APEC 1-The historic and/or current presence of fill material onsite. APEC 2-One empty AST present at the site formerly used for fuel storage. APEC 3-Areas of the site used for personal vehicle maintenance and vehicle storage APEC 4-An off-site waste disposal facility adjacent to the site was historically used as a gasoline service station and petroleum bulk storage site. Waste disposal facility also present here, listed as a waste generator. APEC 5-Evidence of historic rail spurs and rail line activities APEC 6-An offsite large scale petroleum refinery approximately 50 m south of the site.
Final Report-Phase I Environmental Site Assessment – 130 Commissioners Street, Toronto, Ontario	November 18, 2014	Golder Associates Ltd.	Waterfront Toronto	Phase I ESA completed in accordance with O.Reg. 153/04 identified the following six (6) APECs in association with 130 Commissioners Street: APEC 1-Historical and/or current presence of fill material onsite. APEC 2-The presence of four (4) ASTs and one (1) UST at various locations across the site. APEC 3-Use of the site as a scrap metal recycling/processing facility. APEC 4-Adjacent properties 105 and 155 were formerly used for vehicle repair, storage and refueling. 105 Villiers was used for stone blocks and vehicles. APEC 5-The presence of former rail spurs onsite. APEC 6-Adjacent property, 150 Commissioners Street, was formerly used as a petroleum bulk storage site by Imperial Oil and was also a registered generator of solvent wastes and had three registered spills. PCB impacts were also noted on 150 Commissioners Street.
Final Report-Phase II Environmental Site Assessment – 130 Commissioners Street, Toronto, Ontario	November 20, 2014	Golder Associates Ltd.	Waterfront Toronto	Phase II ESA identified impacts to soil and groundwater for PHCs, VOCs, PAHs, metals/inorganics. The impacts were observed in various areas around the Site and were not limited to one location. Concentrations of inorganic parameters in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 Site Condition Standards. (SCS) for sodium at MW-24A and MW-24B, chloride at MW-24A and MW-24B and zinc at MW11-1. Concentrations of PHCs in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 SCS for predominantly F1 and F2 fraction PHCs at monitoring wells MW-14, MW11-6, MW11-7, MW-4A, MW-4B, MW-100A, MW-100B, MW-0707, MW-12A, MW-12B, MW-13A and MW-13B. There are no UCLs specific to PHCs. Concentrations of VOCs in groundwater samples collected in the July 2013 and October 2013 sampling events exceeded the MOE Table 3 or Table 9 SCS for benzene at monitoring wells at MW-4A, MW11-6 and MW11-7, and vinyl chloride and trans-1,2-dichloroethene at MW11-5. Concentrations of PAHs in groundwater samples collected in the July 2013 and October 2013 sampling events all met the MOE Table 3 or Table 9 Site SCS at all groundwater monitoring wells

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				with exception of anthracene at MW-100A, MW11-6 and MW11-7, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene at MW11-6 and MW-101B and benzo(a)pyrene and chrysene at MW11-6. Groundwater impacts at the Site are related to PHC F1, F2 and benzene. Free phase NAPL was identified at one location.
Final-Phase II Environmental Site Assessment, 54 Commissioners Street, Toronto, Ontario	November 6, 2014	Golder Associates Ltd.	Waterfront Toronto	Phase II ESA was comprised of drilling four (4) boreholes which were all completed as monitoring wells. Soil sampling was completed at all locations, two additional existing monitoring wells were monitored. Groundwater samples could not be collected at the site due to the presence of free-phase product being detected at all borehole locations. The thickness of the free-phase product ranged between 0.002 and 0.003 m in the monitoring wells. Soil at the site was reported to be impacted with VOCs, PAHs, PHCs, PCBs, metals/organics all of which exceeded the MOECC Table 3 Standards at all locations.
Limited Environmental Investigation, 20 Polson Street, Toronto, Ontario	September 8, 1997	Shaheen & Peaker Limited	United Castan Corporation	The fieldwork carried out by S&P consisted of drilling a total six (6) sampled boreholes. Four (4) representative samples were submitted for chemical analysis and results were compared with the applicable MOEE Table B Standard. S&P's borehole investigation indicated that the tested soils had not been adversely impacted by the presence of heavy metals or PAHs. Elevated levels of EC and SAR were noted on the site. When considering residential land use criteria, an elevated concentration of TPH-heavy oils was also noted in the central portion of the area of investigation in addition to the elevated EC and SAR. The report noted that at the locations where elevated concentrations of heavy oils, arsenic, and/or cobalt were identified, soil remediation would be required in order to meet current MOEE criteria. If the site use remains commercial/industrial in nature, no remediation of the soils in the vicinity of S&P's boreholes appears warranted. However, during test pitting completed by MMM (1993), elevated concentrations of heavy oils were noted at MMM's TP5 and elevated arsenic was noted at MMM's TP11 and were suspected at TP12. These soils would require removal to meet applicable MOEE Table B Standards. If the site is to be redeveloped for residential land use, remediation of soils containing elevated heavy oils in S&P's BH4 as well as heavy oils and trace metals at various MMM test pit locations would be required. It appeared that the majority of the impacted soils are within the upper 0.5 to 1.5 m of fill.
Draft Phase II Environmental Site Assessment-480 Lakeshore Boulevard East, Toronto, Ontario	2006	Golder Associates Ltd.	Toronto Waterfront Revitalization Corporation	Golder Associates Ltd. ("Golder") was retained by the Toronto Waterfront Revitalization Corporation ("TWRC") to conduct a Phase II Environmental Site Assessment ("ESA") of the property located at 480 Lakeshore Boulevard East, in the City of Toronto, Ontario. The primary objective of the intrusive investigations described herein is to characterize the subsurface conditions at the Site as follows. The scope of work of the Phase II ESA included: • Excavating thirteen (13) test pits to a maximum depth of to 2.1 mbgs; • Drilling fifteen (15) boreholes to a maximum depth of 8.5 mbgs;

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				• Equipping each borehole drilled at the Site with a groundwater monitoring well; and • Collecting soil and groundwater samples for subsequent chemical analyses of one, or more of the following parameters: heavy metals, volatile organic compounds (VOCs), petroleum hydrocarbons (fractions Fl through F4), semi-volatile organic compounds and polychlorinated biphenyls (PCBs). The key findings of the Phase II ESA are: • Soil samples retrieved from within fill material unit at the Site were visually impacted with petroleum hydrocarbons and were characterized as emanating faint to very strong petroleum hydrocarbons odours when handled. • Soil underlying the site is impacted with respect to heavy metals, petroleum hydrocarbons and semi-volatile organic compounds. • The groundwater underlying the site is impacted with petroleum hydrocarbons and semivolatile organic compounds. Golder encountered light non-aqueous phase liquid (LNAPL) in four groundwater wells installed at the Site in this investigation. The thickness of LNAPL measured in groundwater monitoring well installed during this assessment ranged from less than 1 cm to 97 cm. • There appears to be a potential for migration of contaminants onto and off the Site. The presence of LNAPL in groundwater monitoring wells installed along the central portion of the Site suggests that free product may be migrating onto the municipal roadway that separates the western and central portions of the Site. • None of the three (3) composite soil samples that were subjected to Toxicity Characteristic Leaching Procedure analyses in this Phase II ESA are considered to be hazardous according to Ontario Regulation 558. As such, these soil samples could be classified as non-hazardous material for off-Site disposal.
Phase III Environmental Site Assessment (ESA)- 150 Commissioners Street, Toronto, Ontario	June 1995	ADAMAS Environmental Inc.	CP Rail Systems Properties Group	ADAMAS Environmental Inc. was retained by CP Rail System Properties Group to conduct a Phase I Environmental Site Assessment of the subject property. At the time the report was written the subject property collectively known as 150 Commissioners Street in Toronto, Ontario consisted of four parcels of land with the following civic addresses; 150 Commissioners Street, and 105, 155, 165 Villiers Street. The scope of work undertaken for this report consisted of the following tasks: 1) Review, assessment and interpretation of all previous investigative work performed at the site (including Phase I and II ESAs completed by Golder [1992], DCS Remedial Evaluation [1994] and ADAMAS supplementary ESA [1995]); 2) Identification of areas of current and historical potential environmental concern at the site; 3) Identification of parameters indicative of soil impact at the site; 4) Identification of the remediation criteria to be used at the site, drawn from existing and proposed provincial and federal guidelines, and; 5) Quantification of the general soil quality across the site. On the basis of the findings of the previous environmental assessment work carried out by Golder and DCS at

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				150 Commissioners Street in conjunction with ADAMAS's supplementary subsurface investigation, the following conclusions were reached: • A total of seventeen storage tanks which contain various petroleum products are present at the site and should be removed in order to eliminate the major sources of contamination at this site. • The relevant criteria used to assess the materials at the site were: – Level II Site Sensitivity criteria listed in the MOEE Interim Guidelines for the Assessment and Management of Petroleum Contaminated Sites in Ontario, (August, 1993); – Surface and Subsurface criteria for Industrial/Commercial land use listed on tables B and D in the Proposed MOEE Guidelines for the Clean-up of Contaminated Sites in Ontario (DRAFT), (July, 1994). • The estimated maximum quantity of soil impacted by organic (TPH, BTEX, PAHs, VOCs) parameters in excess of the above noted criteria is on the order of 34,070 cubic meters. • The estimated maximum quantity of soils impacted by inorganic (Arsenic) parameters which exceed the above noted criteria is on the order of 500 cubic meters. • The soils identified above (total of 34,565 cubic meters) should be remediated or removed from the site so that all remaining soils meet the relevant criteria. • Possible remedial measures for the materials impacted by organic contaminants included: (1) Excavate and dispose impacted soils at a landfill and Backfill excavations with clean fill. (2) Excavate and remediate soils ex-situ and Backfill excavations with remediated fill. (3) Treat soils in-situ techniques. (4) Manage contamination on-site.
Biopile Soil Sampling Summary Report-Villiers Street Biopile Area	June 3, 2009	Jacques Whitford Stantec Limited	Toronto Economic Development Corporation	Jacques Whitford Stantec Limited (JWSL) prepared a report to document the soil sampling activities from the biopile rows situated on the Villiers Street site, situated on the TEDCO lands west of Don Roadway Street and south of Villiers Street, in the City of Toronto. The biopiles that existed on the site were comprised of petroleum hydrocarbon (PHC) impacted soils imported from a TEDCO source site. Jacques Whitford conducted interim sampling and testing activities of the soil following mixing and amendment addition of the biopile rows situated on the Villiers Street site to determine the effectiveness of the biopile facility to bioremediate petroleum impacted soil to concentrations below MOE Table 3 Standards. Based on the soil analytical results to date, the following conclusions were provided: • Bioremediation activities of the petroleum impacted soil at the Villiers Street Biopile Area effectively reduced the original concentrations of petroleum hydrocarbons. • Approximately 60% of the 31,750 cubic meters (63,500 tonnes) of soils within the biopile rows satisfied the Table 3 Standards for BTEX and PHC fractions F1 to F4. It was recommended that the "clean"-remediated soil (i.e. below Table 3 Standards) and the "dirty" soil be segregated into two separate stockpiles. The "clean"-remediated soil was

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				to be left in a stockpile and awaited transfer and deposition in the near future to another TEDCO property within the Port Lands where fill was required and the Table 3 Standards were applicable. The remaining petroleum impacted soil was to be placed into new biopile rows and mixed with surfactant and nutrients to further enhance the bioremediation process.
Port Lands Environmental, Geotechnical, and Hydrogeological Investigation, Stage 1 and Stage 2, Port Lands, Toronto, Ontario (Revised Draft)	December 31, 2015	GHD Limited	Waterfront Toronto	The most recent soil and groundwater quality sampling data available for the Port Lands was obtained by GHD as part of the Stage 1 and Stage 2 of the Environmental, Geotechnical, and Hydrogeological Investigation (GHD, 2015). Soil sampling activities were completed between July 28 and December 11, 2015. 434 soil samples were collected (including field duplicates and trip blanks) and submitted for laboratory analysis of one or more of the following: VOCs, PHCs, PAHs, and metals and inorganics. The soil analytical results were compared to MOECC Table 7 and Table 9 Standards. Based on the analytical results, soil samples submitted for laboratory analysis had concentrations of VOCs, PHCs, PAHs, and metals and inorganics above the MOECC Table 7 and/or 9 Standards. The soil impacts were generally limited to the upper 4 to 6 metres of soil. Of the 70 boreholes advanced within the proposed valley excavation area, 62 boreholes had concentrations above the MOECC Table 7 and/or 9 Standards for at least one of the parameters analyzed. During the field activities, there was no evidence of free product on any soils encountered, with the exception of one location (MW28-15 from 3.3 to 7.0 mbgs). 97 groundwater monitoring wells were installed, consisting of 12 bedrock wells and 85 overburden wells (15 wells to 10 mbgs, 40 wells to 7 mbgs, and 30 wells to 3 mbgs). GHD collected groundwater samples from each of the newly installed monitoring wells installed for analysis of VOCs, PHCs, PAHs, and metals and inorganics. GHD indicated evidence of petroleum hydrocarbon sheen at the following well locations: MW12B-15, MW13-15, MW15-15, MW18A-15, MW23B-15, MW25B-15, MW27B-15, MW29C-15, MW37B-15, MW41-15. Light non-aqueous phase liquid (LNAPL) was indicated to be found at the following locations: BH138, BH144, BH146, BH148, BH149 installed by SLR and MW11-14, MW12-15, MW13-15, MW16-15, MW17-15, MW28-15, MW29-15, MW38-15, and MW41-15 installed by GHD. The product thickness ranged from 5 cm to greater than 100 cm which was noted at BH144. Evidence of dense non-aqueous phase liquid (DNAPL) was identified at MW28C-15 (GHD, 2015). GHD indicated that VOCs, PHCs, PAHs, metals and inorganics were detected at concentrations above the MOECC Table 7 and/or 9 Standards at several locations.

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Port Lands, Toronto, ON

Report Title	Date	Author	Prepared for	Description
Factual Report Addendum No. 1 – Additional Test Pit Excavations and Groundwater Hydrocarbon Resemblance Port Lands Environmental, Geotechnical and Hydrogeological Investigation RFP #2015-23 Waterfront Toronto	February 8, 2016	GHD Limited	Waterfront Toronto	Additional test pit excavation activities and hydrocarbon resemblance analysis were undertaken at a property located at 51 Commissioners Street. During previous field activities (GHD, 2015), NAPL was encountered at 16 monitoring wells located at the 51 Commissioners Street property (see reference in GHD, 2015 summary). To further investigate the impacts, six test pits (TP1-15 to TP6-15) were completed to a maximum depth of 2.7 mbgs in December 2015, in close proximity to a selection of monitoring well locations where NAPL was observed. Representative soil samples were collected from the investigative locations. Significant PHC odours and staining were observed in TP1-15 to TP5-15, at depths ranging from 1.22 to 2.74 mbgs. Elevated PID readings, ranging from 82.3 to 2058 ppm, were present in soil samples collected from TP1-15 to TP5-15. There was no evidence of NAPL or sheen in TP6-15. Based on the analytical results, soil samples submitted for laboratory analysis had concentrations of VOCs, PHCs, PAHs, and metals and inorganics above the MOECC Table 7 and/or 9 Standards. Elevated PHC soil impacts were present in TP1-15 to TP5-15. A sample of the NAPL at TP1-15 to TP4-15, and the groundwater at TP5-15 and TP6-15, were collected and submitted for laboratory analysis. Elevated PHC groundwater impacts were present in TP1-15 to TP5-15. The hydrocarbon resemblance was reported as motor oil range (TP6-15), diesel/motor oil range (TP1-15, TP3-15, and TP4-15) and gasoline/diesel/motor oil range (TP2-15 and TP5-15). Following the completion of the test pits, GHD collected additional groundwater samples from a selection of monitoring wells with NAPL and submitted for laboratory analysis of PHCs and hydrocarbon resemblance. The NAPL samples were collected from monitoring wells BH144, MW28B-15, MW28C-15 and MW29C-15. Elevated PHC groundwater impacts were present in each sample. The hydrocarbon resemblance was reported as diesel/motor oil range (BH144 and MW28B-15) and gasoline/diesel/motor oil range (MW28-15 and MW29C-15).

Table A4. Data Gaps

Data Gap	Issue	Details
Database-related Gaps	Information to be obtained to determine if there are more relevant COCs	The compiled database did not include the following investigations: - Sitewide groundwater sampling in 2013 (DCS,2014) - Phase Two ESA data from CRA (2014) for 312 Cherry Street - Groundwater data from the Golder (2012) investigation (resampling existing wells) for 281 Cherry Street - Soil and groundwater data from the Adamas investigations (1995a;1995b) for 105-165 Villiers Street, 150 Commissioners Street - Soil data from DCS investigation (DCS, 1997) and UST removal (DCS, 1998) for 105-165 Villiers Street, 150 Commissioners Street - Soil and groundwater data in database from Golder (1990), P&R (1992) and Golder (1991) from 85 to 94 Commissioners Street - Soil and groundwater data in database from Dames & Moore Canada (1994) for 97 Commissioners Street - Soil data from the 1998 V.A. Wood and 1992 DSC investigations for 80 Commissioners Street (locations referenced in DCS (2002) - Soil and groundwater data in database from DCS (2000) investigation and missing groundwater data from CRA (2011) for 75 Commissioners Street - Soil data for DCS (2007b) investigation at 99 Commissioners
	Information to be obtained to determine if there are additional APECs	Data are included in the provided database for an MTE investigation in 2008 on 309 Cherry Street; however, no report was made available for review to interpret and verify results.
		Data are provided for a Terrapex investigation in 2004; however, no report was made available for review to interpret and verify results.
APEC Gaps	Missing historical land use/no previous sampling information; to be obtained to determine if there are additional APECs	No historical or current sampling data provided, or investigations completed, for these addresses: - 175-190 Cherry Street - 1-63 Polson Street - 50-72 Polson Street - 185 Villiers Street
	Information to be obtained to determine if there are additional APECs	Approximately 72 APECs did not have associated sampling conducted to confirm the presence or absence of contaminants of concern. Additionally, 13 APECs have soil but no groundwater investigated.
	Information to be obtained to determine if there are additional APECs	Data are included in the provided database for an MTE investigation in 2008 on 309 Cherry Street; however, no report was made available for review to interpret and verify results. Data are provided for a Terrapex investigation in 2004; however, no report was made available for review to interpret and verify results.
COC and RA Model Gaps	NAPL, soil/groundwater data outside of GHD investigation areas	LNAPL presence/absence and soil and groundwater characterization data in areas outside the GHD investigation areas, especially where the free-phase threshold or ½ solubility is exceeded and there have been historical reports of NAPL (i.e., 309 Cherry Street, 480 Lakeshore Blvd E, 54 Commissioners Street, 75 Commissioners Street, 105 Villiers Street, Block from 21-63 Commissioners, including 181/185 Cherry Street, and 130 Commissioners Street). Areas outside the river valley and not being targeted would need to be further investigated to confirm concentrations and the need for remediation (if above S-GW3) to properly estimate soil volumes and remediation costs.
	Elevated pH	In areas where soil pH was found to be elevated (23 locations), future revitalization activities will need to consider whether additional sampling will be warranted to determine whether the elevated pH is truly representative of site conditions and whether Table 1 Standards will be applicable; whether the elevated pH is localized or anomalous; or whether, through the allowable provisions under O. Reg. 153/04 regarding averaging, it is determined to be within range.
	Extent of NAPL, Depth of Contamination in the Former Imperial Oil lands	There are insufficient data within the Imperial Oil lands to confirm the depth of the contamination. Based on most historical and current data, the extent is generally 3.5 mbgs; however, extends deeper in areas, up to 9 mbgs, with no deeper information available at these locations. The depth of excavation required for river valley construction is assumed

Table A4. Data Gaps

Data Gap	Issue	Details
		to be sufficient to remove the contamination in these lands. No overexcavation is assumed. Additional testing was completed in fall 2015 to address much of this data gap.
	Dredgeate in River Valley Mouth	No environmental or geotechnical information is available for the sediment and soil in the River Valley Mouth (between Polson and Cousins Quay). CH2M has assumed the sediment and soil excavated in the open water can be reused as barrier material (once it is dewatered). Geotechnical testing including consolidation testing performed on the collected undisturbed samples will be required.
	West of Cherry Street	Vinyl chloride west of Cherry Street is currently of unknown origin. Need to evaluate further to confirm that maximum concentration has been identified.
	High PAH areas	Source and extent of contamination unknown. Need to evaluate further to confirm that maximum concentration has been identified.
	Villiers Street	Source and extent of chlorinated solvent contamination unknown. Need to evaluate further to confirm that maximum concentration has been identified.
	Site-wide	Soil FOC data in saturated and nonsaturated and from noncontaminated areas has recently become available to help support developing site-specific criteria.
		Confirming Soil to Outdoor air component value exceedances – especially those in the development blocks that are in the unsaturated zone. Presently, assumptions are being made that the values are not real and these areas are not being targeted for remediation.
Groundwater Elevation Data	Site-Wide	Current groundwater snap shot has limited coverage; no areas outside the GHD investigation area. We understand that many of the historical monitoring wells are no longer present and gaps in the coverage may remain.
Reuse of Fill	Site-wide	Debris such as brick, cinders, cobbles, pebbles, shale, etc. is noted in borehole logs. It is likely and has been assumed that the excavated fill will need to be screened. The percentage of overs and the reuse options for the oversized material has been assumed to be minimal. Approximately 20% (by volume) of the fill excavated in the river valley construction has been assumed to require disposal off site. There may be alternatives for this soil, but until additional test pits and pilot-test screening of the fill is done, this remains a data gap.
	Cousins Quay	Soil in Cousins Quay assumed reusable. More specific testing at depth.
Remediation and RMM	Sitewide	The ability of a soil-washing system and bioremediation to treat the highly contaminated PHC-impacted soil to S-GW3 treatment criteria has not been proven. Pilot-scale testing should be completed.
	Hazardous Waste	Hazardous waste has not been identified in the CBRA Area. The assumption that all material is nonhazardous should be confirmed (particularly for the locations with elevated lead concentrations).
	Stabilization techniques	The ability of RMMs to control NAPL migration if required is to be tested through bench scale and field scale testing.

Notes:
CRA - Conestoga-Rovers & Associates
DCS - Decommissioning Consulting Services
FOC - fraction of organic carbon
GHD - GHD Limited
Golder - Golder Associates, Limited
LNAPL - light nonaqueous phase liquid
mbgs - metre below ground surface
P&R - Proctor and Redfern Limited
PAH - polycyclic aromatic hydrocarbon
PHC - petroleum hydrocarbon
Terrapex - Terrapex Environmental Ltd.
UST - underground storage tank

Table A6. Groundwater Elevation Measurements

Waterfront Toronto - Port Lands

Well No.	Depth to bottom	Sandpack Interval		Lithology Screened	Ground Elevation	Reference Elevation[1]	Groundwater Elevations September 1, 2015			Groundwater Elevations December 8, 2015		
		Top	Bottom									
	(mBGS)	(mBGS)	(mBGS)		(mAMSL)	(mAMSL)	(mBTOR)	(mBGS)	(mAMSL)	(mBTOR)	(mBGS)	(mAMSL)
MW1A-15	7.47	4.12	7.47	Sand (NATIVE)	77.32	77.25	2.03	2.11	75.22	2.34	2.42	74.91
MW1B-15	3.05	1.22	3.05	Sand (FILL)	77.29	77.21	2.03	2.11	75.18	2.34	2.42	74.87
MW2A-15	7.47	4.12	7.47	Sand (NATIVE)	77.41	77.33	2.16	2.24	75.17	2.47	2.55	74.86
MW2B-15	3.05	1.52	3.05	Silt/Sand (FILL)/Sand (NATIVE)	77.40	77.32	2.16	2.25	75.16	2.47	2.56	74.85
MW3A-15	7.62	3.96	7.62	Sand (NATIVE)	76.67	76.60	1.41	1.48	75.19	-	-	-
MW3B-15	3.05	1.22	3.05	Sand Native/Sand (FILL)	76.70	76.59	1.40	1.51	75.19	-	-	-
MW5A-15	6.86	3.20	6.86	Sand and Gravel (FILL)	76.92	76.82	1.72	1.83	75.10	2.20	2.31	74.62
MW5B-15	3.05	1.22	3.05	Sand and Gravel (FILL)	76.93	76.81	1.71	1.83	75.10	2.20	2.32	74.61
MW6A-15	7.32	3.05	7.32	Sand (NATIVE)	76.61	76.55	1.39	1.45	75.16	1.74	1.80	74.81
MW6B-15	3.05	1.52	3.05	Sand (NATIVE)	76.64	76.57	1.40	1.47	75.17	1.76	1.83	74.81
MW7A-15	7.62	3.96	7.62	Sand (NATIVE)	76.29	76.20	1.03	1.12	75.17	-	-	-
MW7B-15	3.05	1.52	3.05	Sand (FILL)/Sand (NATIVE)	76.28	76.21	1.03	1.10	75.18	-	-	-
MW8A-15	6.10	2.44	6.10	Silty Clay (FILL)/Silty Sand (NATIVE)	76.48	76.40	1.24	1.32	75.16	1.78	1.86	74.62
MW8B-15	3.05	1.22	3.05	Silty Clay (FILL)	76.47	76.37	1.21	1.32	75.16	1.75	1.86	74.62
MW9A-15	7.47	3.81	7.47	Clayey Silt/Sand/Gravelly Sand (FILL)	76.87	76.76	1.61	1.72	75.15	1.70	1.81	75.06
MW9B-15	3.05	1.22	3.05	Sand and Gravel/Sand (FILL)	76.87	76.75	1.45	1.57	75.30	2.05	2.17	74.70
MW10A-15	7.32	3.66	7.32	Sand and Gravel/Sand (FILL)	76.35	77.27	2.16	1.24	75.11	1.65	0.73	75.62
MW10B-15	3.05	1.22	3.05	Sand/Sand with Silt/Sand and Gravel (FILL)	76.34	77.29	2.16	1.21	75.13	1.68	0.73	75.61
MW11-15	7.50	2.90	6.50	Sand/Silty Sand/Peat (FILL)	76.84	76.76	-	-	-	1.99	2.07	74.77
MW12A-15	7.50	3.65	7.31	Clayey Silt/Sandy Silt/Peat/Sand/Sand & Gravel (NATIVE)	77.18	78.07	-	-	-	3.31	2.42	74.76
MW12B-15	3.04	1.21	3.04	Sandy Silt/Gravelly Sand (FILL)	77.20	78.00	-	-	-	2.61	1.81	75.39
MW13-15	7.31	3.65	7.31	Clayey Silt (FILL)/Peat and Sand (NATIVE)	77.24	78.13	-	-	-	2.96	2.06	75.17
MW14-15	7.46	3.50	7.16	Sand/Silty Clay/Silty Sand/Sand (FILL)	77.79	77.69	-	-	-	2.93	3.03	74.76
MW15-15	7.46	3.35	7.01	Silty Clay/Gravelly Sand (FILL)/Sand (NATIVE)	77.03	76.91	-	-	-	2.15	2.26	74.76
MW16A-15	7.46	3.65	7.31	Sand/Peat/Sand (NATIVE)	77.28	78.13	-	-	-	3.38	2.53	74.75
MW17-15	7.46	3.65	7.31	Sand/Silty Clay/Peat/Sand (NATIVE)	77.14	77.04	-	-	-	2.19	2.29	74.85
MW18A-15	7.47	3.81	7.47	Peat/Clayey Silt and Peat/Sand (NATIVE)	77.06	76.94	1.82	1.93	75.12	2.21	2.32	74.73
MW18B-15	3.05	1.22	3.05	Sand (FILL)	77.09	76.98	1.78	1.89	75.20	1.76	1.87	75.22
MW19-15	7.46	3.81	7.46	Sand/Peat/Sand (NATIVE)	77.65	78.54	-	-	-	3.69	2.80	74.85
MW20A-15	7.01	3.96	7.01	Silt/Organic Silt and Clay/Sand/Silt/Peat/Sand/Silt (NATIVE)	76.70	77.71	2.56	1.55	75.15	2.91	1.90	74.80
MW20B-15	3.05	1.52	3.05	Sand (FILL)	76.72	77.87	2.60	1.45	75.27	2.60	1.45	75.27
MW21A-15	9.15	5.49	9.15	Silty Clay/Sand and Silt/Silty Clay/Silt/Sand (NATIVE)	79.54	80.41	5.29	4.42	75.12	5.71	4.84	74.70
MW21B-15	6.10	4.27	6.10	Silty Sand (FILL)/Silty Clay (NATIVE)	79.56	80.43	4.56	3.69	75.87	4.80	3.93	75.63
MW22-15	9.14	7.31	9.14	Silty Clay (NATIVE)	78.26	79.20	-	-	-	3.93	2.99	75.27
MW23A-15	9.76	6.10	9.76	Peat/Sand (NATIVE)	79.98	80.89	5.79	4.87	75.10	6.22	5.30	74.67
MW23B-15	6.10	4.27	6.10	Sand and Silt/Silty Clay (FILL)	80.05	81.00	5.73	4.78	75.27	5.90	4.95	75.10
MW25A-15	10.06	6.34	10.06	Clayey Sand/Silty Clay/Clayey Sand (FILL)	79.08	80.02	4.96	4.03	75.06	5.39	4.46	74.63
MW25B-15	5.03	1.65	5.03	Gravel and Shale/Topsoil with Sand/Silty Clay/Silty Sand/Clayey Sand (FILL)	79.09	80.09	4.92	3.92	75.17	5.37	4.37	74.72
MW26A-15	19.82	16.46	19.82	Bedrock	76.75	77.59	2.71	1.88	74.88	2.18	1.35	75.41
MW26B-15	8.84	5.18	8.84	Sand (NATIVE)	76.73	77.64	2.52	1.61	75.12	1.98	1.07	75.66
MW26C-15	6.71	3.05	6.71	Sand Fill/Sand (NATIVE)	76.66	77.57	2.45	1.54	75.12	2.00	1.09	75.57
MW26D-15	3.05	1.22	3.05	Sand/Silty Sand (FILL)	76.65	77.59	2.48	1.54	75.11	2.00	1.06	75.59
MW27A-15	21.49	17.68	21.49	Bedrock	77.41	77.27	2.25	2.40	75.02	2.71	2.86	74.56
MW27B-15	10.67	7.01	10.67	Sand (NATIVE)	76.85	76.77	1.61	1.69	75.16	2.34	2.42	74.43
MW27C-15	6.10	2.44	6.10	Silt to Clayey Silt (FILL)/Silty Clay/Sand (NATIVE)	76.85	76.77	1.66	1.75	75.11	2.14	2.23	74.63
MW27D-15	3.05	1.22	3.05	Gravelly Sand/Silty Clay/Silt to Clayey Silt (FILL)	76.88	76.79	1.29	1.38	75.50	2.34	2.43	74.45
MW28A-15	45.72	28.95	33.52	Sand TILL/Silt/Sand (NATIVE)	76.87	76.76	-	-	-	2.07	2.18	74.69
MW28B-15	9.75	5.79	9.75	Sand (FILL)/Sand (NATIVE)	76.88	76.79	-	-	-	2.02	2.10	74.77
MW28C-15	6.70	3.04	6.70	Gravel/Clayey Silt/Sand (FILL)	76.87	76.83	-	-	-	2.05	2.09	74.78
MW28D-15	3.04	0.91	3.04	Sand/Gravel (FILL)	76.85	76.80	-	-	-	1.70	1.76	75.10
MW29A-15	10.66	8.53	10.66	Gravelly Sand/Sand (NATIVE)	76.95	78.02	-	-	-	3.28	2.21	74.74
MW29B-15	7.31	5.18	7.31	Peat/Sand (FILL)	77.05	78.08	-	-	-	2.61	1.58	75.47
MW29C-15	3.04	1.21	3.04	Sand/Sand & Gravel (FILL)	76.96	78.00	-	-	-	3.34	2.30	74.66
MW30A-15	24.80	21.14	24.80	Bedrock	77.07	78.05	2.89	1.90	75.16	3.42	2.43	74.63
MW30B-15	10.06	6.40	10.06	Sand Native	77.11	78.05	2.95	2.01	75.10	3.40	2.46	74.65
MW30C-15	6.10	2.44	6.10	Silty Clay/Peat/Silt (NATIVE)	77.15	78.16	2.95	1.95	75.21	3.25	2.25	74.91
MW30D-15	3.05	1.52	3.05	Sand/Silty Clay (FILL)	77.18	78.23	3.00	1.94	75.23	3.26	2.20	74.97
MW31A-15	24.17	20.43	24.17	Bedrock	80.03	81.06	6.04	5.01	75.02	6.47	5.44	74.59
MW31B-15	13.72	10.05	13.72	Sand and Gravel/Sand (NATIVE)	80.03	81.09	5.97	4.91	75.12	6.38	5.32	74.71
MW31C-15	10.37	6.71	10.37	Silty Clay/Sandy Silt/Silty Sand/Sand (FILL)	80.03	81.08	5.96	4.91	75.12	6.37	5.32	74.71
MW31D-15	6.10	4.27	6.10	Clayey Silt/Peat (NATIVE)	79.99	81.07	5.27	4.19	75.80	5.44	4.36	75.63
MW32A-15	20.12	16.46	20.12	Bedrock	76.93	76.87	1.74	1.80	75.13	2.18	2.24	74.69
MW32B-15	10.67	7.01	10.67	Sand (NATIVE)	77.00	76.96	1.83	1.87	75.13	2.27	2.31	74.69
MW32C-15	7.01	3.35	7.01	Peat/Silt (NATIVE)	77.03	76.90	1.79	1.92	75.11	2.15	2.28	74.75
MW32D-15	3.05	1.52	3.05	Silt/Sand/Silt (FILL)	77.07	77.02	0.96	1.01	76.06	2.18	2.23	74.84
MW33A-15	20.11	16.45	20.11	Bedrock	77.16	77.07	-	-	-	2.39	2.48	74.68
MW33B-15	10.36	7.92	10.36	Sand (NATIVE)	77.11	78.05	2.95	2.01	75.10	3.40	2.46	74.65
MW33C-15	7.01	4.57	6.85	Sandy Silt/Sand (FILL)	77.15	78.16	2.95	1.95	75.21	3.25	2.25	74.91
MW33D-15	3.04	1.21	3.04	Sand & Gravel/Silty Clay/Peat/Silty Clay (FILL)	77.18	78.23	3.00	1.94	75.23	3.26	2.20	74.97
MW34A-15	21.20	17.38	21.20	Bedrock	79.02	80.12	5.12	4.01	75.00	5.57	4.46	74.55
MW34B-15	13.72	10.06	13.72	Sand Fill/Silty Sand (NATIVE)	79.08	80.10	4.97	3.95	75.13	5.38	4.36	74.72
MW34C-15	10.67	7.01	10.67	Peat/Silty Clay (NATIVE)	79.11	80.14	5.02	3.99	75.12	5.43	4.40	74.71
MW34D-15	6.10	4.27	6.10	Gravelly Sand/Silt (FILL)	79.12	80.16	5.36	4.32	74.80	5.45	4.41	74.71
MW35A-15	23.02	19.36	23.02	Bedrock	77.17	77.10	1.96	2.03	75.14	2.41	2.48	74.69
MW35B-15	9.76	6.10	9.76	Peat/Silty Clay (NATIVE)	80.07	80.97	5.85	4.96	75.12	6.27	5.38	74.70
MW35C-15	6.10	4.27	6.10	Silty Clay (FILL)	80.07	80.98	5.10	4.19	75.88	5.23	4.32	75.75
MW35D-15*	12.80	9.15	12.80	Sand (FILL)	80.07	80.84	5.72	4.94	75.12	6.13	5.35	74.71
MW36A-15	21.54	17.68	21.54	Bedrock	76.43	76.32	1.26	1.37	75.06	1.83	1.94	74.49
MW36B-15	10.67	7.01	10.67	Sand (NATIVE)	76.49	76.41	1.23	1.31	75.18	1.55	1.63	74.86
MW36C-15	6.10	2.44	6.10	Sand (NATIVE)	76.45	76.36	1.19	1.28	75.17	1.50	1.59	74.86
MW36D-15	3.05	1.22	3.05	Sand (FILL)/Sand (NATIVE)	76.47	76.40	1.21	1.28	75.19	1.57	1.64	74.83
MW37A-15**	23.10	19.51	23.10	Bedrock	76.46	76.27	1.85	2.03	74.42	-	-	-
MW37B-15	10.67	7.01	10.67	Sand (FILL)	76.45	76.38	1.22	1.29	75.16	1.58	1.65	74.80
MW37C-15	7.62	3.96	7.62	Sand (FILL)	76.45	76.37	1.22	1.30	75.15	1.55	1.63	74.82
MW37D-15	3.05	1.52	3.05	Sand to Sandy Silt Fill/Sand (FILL)	76.45	76.38	1.22	1.28	75.16	1.57	1.63	74.81
MW38A-15	9.75	8.53	9.14	Sand (NATIVE)	76.97	77.85	-	-	-	3.13	2.24	74.72
MW38B-15	6.70	4.26	6.70	Peat/Sand (NATIVE)	76.97	77.82	-	-	-	3.09	2.24	74.73
MW38C-15	3.04	1.21	3.04	Silty Sand/Sand/Silty Sand (FILL)	76.97	77.83	-	-	-	2.56	1.70	75.27
MW39A-15	15.85	12.20	15.85	Bedrock	76.51	77.49	2.39	1.42	75.10	2.82	1.85	74.67
MW39B-15	10.67	7.01	10.67	Silty Clay/Silty Sand/Gravelly Sand/Shale (NATIVE)	76.50	77.48	2.36	1.38	75.12	2.80	1.82	74.68
MW39C-15	7.62	3.96	7.62	Peat/Silty Clay (NATIVE)	76.54	77.58	2.45	1.41	75.13	2.90	1.86	74.68
MW39D-15	3.05	1.22	3.05	Sand/Silty Clay/Peat (NATIVE)	76.55	77.52	2.41	1.44	75.11	2.77	1.80	74.75
MW40A-15	16.24	12.59	16.24	Bedrock	76.81	77.69	2.54	1.66	75.15	2.96	2.08	74.73
MW40B-15	10.57	7.01	10.57	Silty Sand/Sand (FILL)	76.89	77.72	2.57	1.74	75.15	2.99	2.16	74.73
MW40C-15	6.10	2.44	6.10	Silt/Sandy Silt/Silt/Sandy Silt (FILL)	76.90	77.66	2.43	1.67	75.23	2.78	2.02	74.88
MW40D-15	3.05	1.22	3.05	Gravel Fill/Clay (FILL)	76.93	77.81	2.39	1.51	75.42	2.57	1.69	75.24
MW41-15	7.46	3.65	6.09	Peat/Silt (FILL)/ Peat/Gravelly Sand (NATIVE)	77.00	77.74	-	-	-	3.00	2.27	74.74

Notes:

1. Reference elevation taken from top of riser pipe.

* Elevations for MW35D-15 are approximate.

** Monitoring well casing damaged.

mAMSL metres above mean sea level. Elevations referenced with respect to benchmark.

mBGS metres below ground surface

mBTOR metres Below Top of Riser

Table A7. Vertical Hydraulic Gradients and Groundwater Flow Velocities

Waterfront Toronto - Port Lands

Well No.	Easting	Northing	Depth to bottom	Sandpack Interval Top	Sandpack Interval Bottom	Lithology Screened	Ground Elevation	Top of Riser Pipe Elevation	Bottom of Well	Groundwater Elevations *September 1, 2015*			Vertical Hydraulic Gradient	Vertical Hydraulic Gradient Direction	Horizontal Hydraulic Conductivity (K_x)	Vertical Hydraulic Conductivity (K_z)	Effective Porosity	Vertical Groundwater Flow Velocity	Groundwater Elevations *December 8, 2015*			Vertical Hydraulic Gradient	Vertical Hydraulic Gradient Direction	Horizontal Hydraulic Conductivity (K_x)	Vertical Hydraulic Conductivity (K_z)	Effective Porosity	Vertical Groundwater Flow Velocity
			(mbgs)	(mbgs)	(mbgs)		(mamsl)	(mamsl)	(mamsl)	(mBTOR)	(mBGS)	(mAMSL)	(m/m)		(m/day)	(m/day)	(%)	(m/year)	(mBTOR)	(mBGS)	(mAMSL)	(m/m)		(m/day)	(m/day)	(%)	(m/year)
MW1B-15	316316.706	4833463.14	3.050	1.220	3.050	Sand (FILL)	77.293	77.211	74.243	2.030	2.112	75.181			57.37	5.74	0.35		2.34	2.42	74.87			57.37	5.74	0.35	
MW1A-15	316316.59	4833463.65	7.470	4.120	7.470	Sand (NATIVE)	77.321	77.245	69.851	2.030	2.106	75.215	-0.008	Upward Gradient	15.28	1.53	0.35	12	2.34	2.42	74.91	-0.009	Upward Gradient	15.28	1.53	0.35	15
MW2B-15	316383.78	4833402.5	3.050	1.520	3.050	Silt/Sand (FILL)/Sand (NATIVE)	77.402	77.316	74.350	2.160	2.246	75.156			9.33	0.93	0.35		2.47	2.56	74.85			9.33	0.93	0.35	
MW2A-15	316384.318	4833402.94	7.470	4.120	7.470	Sand (NATIVE)	77.405	77.326	69.935	2.160	2.239	75.166	-0.002	Upward Gradient	41.14	4.11	0.35	10	2.47	2.55	74.86	-0.002	Upward Gradient	41.14	4.11	0.35	10
MW3B-15	316424.903	4833587	3.050	1.220	3.050	Sand (FILL)/Sand (NATIVE)	76.699	76.590	73.649	1.400	1.509	75.190			9.33	0.93	0.35		-	-	-			9.33	0.93	0.35	
MW3A-15	316425.275	4833586.22	7.620	3.960	7.620	Sand (NATIVE)	76.668	76.603	69.048	1.410	1.475	75.193	-0.001	Upward Gradient	41.14	4.11	0.35	3	-	-	-			41.14	4.11	0.35	
MW5B-15	316587.538	4833403.56	3.050	1.220	3.050	Sand and Gravel (FILL)	76.925	76.807	73.875	1.710	1.828	75.097			118.71	11.87	0.30		2.2	2.32	74.61			118.71	11.87	0.30	
MW5A-15	316587.055	4833404.28	6.860	3.200	6.860	Sand and Gravel (FILL)	76.924	76.817	70.064	1.720	1.827	75.097	0.000	Downward Gradient	18.23	1.82	0.30	0	2.2	2.31	74.62	-0.003	Upward Gradient	18.23	1.82	0.30	6
MW6B-15	316603.13	4833627.67	3.050	1.520	3.050	Sand (NATIVE)	76.636	76.570	73.590	1.400	1.466	75.170			41.14	4.11	0.35		1.76	1.83	74.81			41.14	4.11	0.35	
MW6A-15	316602.702	4833628.43	7.320	3.050	7.320	Sand (NATIVE)	76.605	76.546	69.285	1.390	1.449	75.156	0.003	Downward Gradient	41.14	4.11	0.35	14	1.74	1.8	74.81	0.000	No Gradient	41.14	4.11	0.35	0
MW7B-15	316558.96	4833507.7	3.050	1.520	3.050	Sand (FILL)/Sand (NATIVE)	76.281	76.210	73.230	1.030	1.101	75.180			9.33	0.93	0.35		-	-	-			9.33	0.93	0.35	
MW7A-15	316558.651	4833508.6	7.620	3.960	7.620	Sand (NATIVE)	76.288	76.198	68.668	1.030	1.120	75.168	0.003	Downward Gradient	41.14	4.11	0.35	11	-	-	-			41.14	4.11	0.35	
MW8B-15	316422.349	4833284.86	3.050	1.220	3.050	Silty Clay (FILL)	76.474	76.367	73.424	1.210	1.317	75.157			0.54	0.05	0.20		1.75	1.86	74.62			0.54	0.05	0.20	
MW8A-15	316422.025	4833285.83	6.100	2.440	6.100	Silty Clay (FILL)/Silty Sand (NATIVE)	76.482	76.404	70.382	1.240	1.318	75.164	-0.002	Upward Gradient	18.85	1.89	0.30	5	1.78	1.86	74.62	0.000	No Gradient	18.85	1.89	0.30	0
MW9B-15	316688.78	4833597.61	3.050	1.220	3.050	Sand and Gravel/Sand (FILL)	76.866	76.745	73.816	1.450	1.571	75.295			3.44	0.34	0.30		2.05	2.17	74.7			3.44	0.34	0.30	
MW9A-15	316689.279	4833596.82	7.470	3.810	7.470	Clayey Silt/Sand/Gravelly Sand (FILL)	76.873	76.762	69.403	1.610	1.721	75.152	0.032	Downward Gradient	18.85	1.89	0.30	74	1.7	1.81	75.06	-0.082	Upward Gradient	18.85	1.89	0.30	187
MW10B-15	316422.616	4833781.78	3.050	1.220	3.050	Sand/Sand with Silt/Sand and Gravel (FILL)	76.335	77.285	73.285	2.160	1.210	75.125			18.85	1.89	0.30		1.68	0.73	75.61			18.85	1.89	0.30	
MW10A-15	316423.718	4833782.06	7.320	3.660	7.320	Sand and Gravel/Sand (FILL)	76.347	77.270	69.027	2.160	1.237	75.110	0.004	Downward Gradient	3.44	0.34	0.30	1	1.65	0.73	75.62	-0.002	Upward Gradient	3.44	0.34	0.30	1
MW12B-15	316995.02	4833670.02	3.040	1.210	3.040	Sandy Silt/Gravelly Sand (FILL)	77.200	78.000	74.160	-	-	-			5.39	0.54	0.30		2.61	1.81	75.39			5.39	0.54	0.30	
MW12A-15	316995.69	4833668.41	7.500	3.650	7.310	Clayey Silt/Sandy Silt/Peat/Sand/Sand & Gravel (NATIVE)	77.180	78.070	69.680	-	-	-			8.52	0.85	0.30		3.31	2.42	74.76	0.141	Downward Gradient	8.52	0.85	0.30	146
MW18B-15	317094.484	4833902.02	3.050	1.220	3.050	Sand (FILL)	77.093	76.980	74.043	1.780	1.893	75.200			57.37	5.74	0.35		1.76	1.87	75.22			57.37	5.74	0.35	
MW18A-15	317094.185	4833901.24	7.470	3.810	7.470	Peat/Clayey Silt and Peat/Sand (NATIVE)	77.056	76.941	69.586	1.820	1.935	75.121	0.018	Downward Gradient	45.20	4.52	0.35	84	2.21	2.32	74.73	0.110	Downward Gradient	45.20	4.52	0.35	518
MW20B-15	317129.43	4834167.4	3.050	1.520	3.050	Sand (FILL)	76.723	77.869	73.670	2.600	1.454	75.269			0.25	0.03	0.35		2.6	1.45	75.27			0.25	0.03	0.35	
MW20A-15	317128.801	4834166.08	7.010	3.960	7.010	Silt/Organic Silt and Clay/Sand/Silt/Peat/Sand/Silt (NATIVE)	76.699	77.713	69.689	2.560	1.546	75.153	0.029	Downward Gradient	0.54	0.05	0.30	2	2.91	1.9	74.8	0.118	Downward Gradient	0.54	0.05	0.30	8
MW21B-15	317254.528	4833832.32	6.100	4.270	6.100	Silty Sand (FILL)/Silty Clay (NATIVE)	79.557	80.425	73.457	4.560	3.692	75.865			18.85	1.89	0.30		4.8	3.93	75.63			18.85	1.89	0.30	
MW21A-15	317254.928	4833831.51	9.150	5.490	9.150	Silty Clay/Sand and Silt/Silty Clay/Silt/Sand (NATIVE)	79.544	80.411	70.394	5.290	4.423	75.121	0.243	Downward Gradient	0.54	0.05	0.30	16	5.71	4.84	74.7	0.304	Downward Gradient	0.54	0.05	0.30	20
MW23B-15	317249.74	4833950.5	6.100	4.270	6.100	Sand and Silt/Silty Clay (FILL)	80.045	80.996	73.945	5.730	4.779	75.266			0.54	0.05	0.30		5.9	4.95	75.1			0.54	0.05	0.30	
MW23A-15	317249.459	4833951.69	9.760	6.100	9.760	Peat/Sand (NATIVE)	79.977	80.893	70.217	5.790	4.874	75.103	0.044	Downward Gradient	45.20	4.52	0.35	206	6.22	5.3	74.67	0.115	Downward Gradient	45.20	4.52	0.35	544
MW25B-15	317621.77	4833906.85	5.030	1.650	5.030	Gravel and Shale/Topsoil with Sand/Silty Clay/Silty Sand/Clayey Sand (FILL)	79.086	80.085	74.056	4.920	3.921	75.165			18.85	1.89	0.30		5.37	4.37	74.72			18.85	1.89	0.30	
MW25A-15	317622.539	4833905.75	10.060	6.340	10.060	Clayey Sand/Silty Clay/Clayey Sand (FILL)	79.083	80.016	69.023	4.960	4.027	75.056	0.022	Downward Gradient	0.54	0.05	0.30	1	5.39	4.46	74.63	0.018	Downward Gradient	0.54	0.05	0.30	1
MW26D-15	316488.198	4833819.08	3.050	1.220	3.050	Sand/Silty Sand (FILL)	76.652	77.592	73.602	2.480	1.540	75.112			18.85	1.89	0.35		2	1.06	75.59			18.85	1.89	0.35	
MW26C-15	316489.528	4833819.82	6.710	3.050	6.710	Sand Fill/Sand (NATIVE)	76.659	77.569	69.949	2.450	1.540	75.119	-0.002	Upward Gradient	57.36	5.74	0.35	11	2	1.09	75.57	0.005	Downward Gradient	57.36	5.74	0.35	33
MW26B-15	316490.43	4833820.49	8.840	5.180	8.840	Sand (NATIVE)	76.726	77.635	67.886	2.520	1.611	75.115	0.002	Downward Gradient	41.14	4.11	0.35	8	1.98	1.07	75.66	-0.044	Upward Gradient	41.14	4.11	0.35	187
MW26A-15	316493.68	4833822.64	19.820	16.460	19.820	Bedrock	76.752	77.586	56.932	2.710	1.876	74.876	0.022	Downward Gradient	1.87	0.19	0.02	74	2.18	1.35	75.41	0.023	Downward Gradient	1.87	0.19	0.02	78
MW27D-15	316512.645	4833307.52	3.050	1.220	3.050	Gravelly Sand/Silty Clay/Silt to Clayey Silt (FILL)	76.875	76.787	73.825	1.290	1.378	75.497			18.85	1.89	0.20		2.34	2.43	74.45			18.85	1.89	0.20	
MW27C-15	316511.869	4833306.82	6.100	2.440	6.100	Silt to Clayey Silt (FILL)/Silty Clay/Sand (NATIVE)	76.854	76.766	70.754	1.660	1.748	75.106	0.127	Downward Gradient	0.54	0.05	0.30	8	2.14	2.23	74.63	-0.059	Upward Gradient	0.54	0.05	0.30	4
MW27B-15	316511.15	4833306.52	10.670	7.010	10.670	Sand (NATIVE)	76.846	76.770	66.176	1.610	1.686	75.160	-0.012	Upward Gradient	41.14	4.11	0.35	51	2.34	2.42	74.43	0.044	Downward Gradient	41.14	4.11	0.35	187
MW27A-15	316331.998	4833623.92	21.490	17.680	21.490	Bedrock	77.411	77.265	55.921	2.250	2.396	75.015	0.014	Downward Gradient	2.78	0.28	0.02	72	2.71	2.86	74.56	-0.013	Upward Gradient	2.78	0.28	0.02	64
MW28D-15	316878.99	4833757.44	3.040	0.910	3.040	Sand/Gravel (FILL)	76.850	76.800	73.810	-	-	-							1.7	1.76	75.1						
MW28C-15	316880.31	4833757.9	6.700	3.040	6.700	Gravel/Clayey Silt/Sand (FILL)	76.870	76.830	70.170	-	-	-							2.05	2.09	74.78	0.088	Downward Gradient				
MW28B-15	316875.96	4833755.72	9.750	5.790	9.750	Sand (FILL)/Sand (NATIVE)	76.880	76.790	67.130	-	-	-							2.02	2.1	74.77	0.003	Downward Gradient				
MW28A-15	316877.68	4833756.22	45.720	28.950	33.520	Sand TILL/Silt/Sand (NATIVE)	76.870	76.760	31.150	-	-	-							2.07	2.18	74.69	0.002	Downward Gradient				
MW29C-15	316966.55	4833710.86	3.040	1.210	3.040	Sand/Sand & Gravel (FILL)	76.960	78.000	73.920	-	-	-			3.32	0.33	0.30		3.34	2.3	74.66			3.32	0.33	0.30	
MW29B-15	316967.59	4833709.01	7.310	5.180	7.310	Peat/Sand (FILL)	77.050	78.080	69.740	-	-	-			8.57	0.86	0.35		2.61	1.58	75.47	-0.194	Upward Gradient	8.57	0.86	0.35	173
MW29A-15	316965	4833713.32	10.660	8.530	10.660	Gravelly Sand/Sand (NATIVE)	76.950	78.020	66.290	-	-	-			5.40	0.54	0.35		3.28	2.21	74.74	0.212	Downward Gradient	5.40	0.54	0.35	119
MW30D-15	317425.825	4833744.38	3.050	1.520	3.050	Sand/Silty Clay (FILL)	77.175	78.232	74.125	3.000	1.943	75.232			0.54	0.05	0.35		3.26	2.2	74.97			0.54	0.05	0.35	
MW30C-15	317424.528	4833743.6	6.100	2.440	6.100	Silty Clay/Peat/Silt (NATIVE)	77.154	78.156	71.054	2.950	1.948	75.206	0.008	Downward Gradient	45.20	4.52	0.40	35	3.25	2.25	74.91	0.020	Downward Gradient	45.20	4.52	0.40	81
MW30B-15	317423.35	4833742.9	10.060	6.400	10.060	Sand Native	77.106	78.050	67.046	2.950	2.006	75.100	0.026	Downward Gradient	41.14	4.11	0.35	113	3.4	2.46	74.65	0.065	Downward Gradient	41.14	4.11	0.35	278
MW30A-15	317422.446	4833742.35	24.800	21.140	24.800	Bedrock	77.065	78.053	52.265	2.890	1.902	75.163	-0.004	Upward Gradient	1.87	0.19	0.02	15	3.42	2.43	74.63	0.001	Downward Gradient	1.87	0.19	0.02	5
MW31D-15	317269.883	4833918.05	6.100	4.270	6.100	Sand (FILL)/Clayey Silt/Peat (NATIVE)	79.993	81.069	73.893	5.270	4.194	75.799			0.42	0.04	0.4		5.44	4.36	75.63			0.42	0.04	0.4	
MW31C-15	317269.34	4833918.85	10.370	6.710	10.370	Silty Clay/Sandy Silt/Silty Sand/Sand (NATIVE)	80.032	81.081	69.662	5.960	4.911	75.121	0.160	Downward Gradient	0.54	0.05	0.3	11	6.37	5.32	74.71	0.217	Downward Gradient	0.54	0.05	0.3	14
MW31B-15	317268.125	4833917.06	13.720	10.050	13.720	Sand and Gravel/Sand (NATIVE)	80.030	81.092	66.310	5.970	4.908	75.122	0.000	Upward Gradient	118.71	11.87	0.35	4	6.38	5.32	74.71	0.000	No Gradient	118.71	11.87	0.35	0
MW31A-15	317267.52	4833917.96	24.170	20.430	24.170	Bedrock	80.032	81.064	55.862	6.040	5.008	75.024	0.009	Downward Gradient	1.87	0.19	0.02	32	6.47	5.44	74.59	0.011	Downward Gradient	1.87	0.19	0.02	39
MW32D-15	317454.85	4834075.46	3.050	1.520	3.050	Silt/Sand/Silt (FILL)	77.074	77.021	74.024	0.960	1.013	76.061			0.54	0.05	0.3		2.18	2.23	74.84			0.54	0.05	0.3	
MW32C-15	317455.497	4834074.31	7.010	3.350	7.010	Peat/Silt (NATIVE)	77.030	76.896	70.020	1.790	1.924	75.106	0.239	Downward Gradient	45.20	4.52	0.4	984	2.15	2.28	74.75	0.022	Downward Gradient	45.20	4.52	0.4	93
MW32B-15	317456.236	4834073.08	10.670	7.010	10.670	Sand (NATIVE)	76.998	76.962	66.328	1.830	1.866	75.132	-0.007	Upward Gradient	41.14	4.11	0.35	30	2.27	2.31	74.69	0.016	Downward Gradient	41.14	4.11	0.35	70
MW32A-15	317456.517	4834071.84	20.120	16.460	20.120	Bedrock	76.929	76.865	56.809	1.740	1.804	75.125	0.001	Downward Gradient	1.87	0.19	0.02	3	2.18	2.24	74.69	0.000	No Gradient	1.87	0.19	0.02	0
MW33D-15	317136.19	4833963.39	3.040	1.210	3.040	Sand & Gravel/Silty Clay/Peat/Silty Clay (FILL)	77.180	78.230	74.140	3.000	1.940	75.230			0.54	0.05	0.35		3.26	2.2	74.97			0.54	0.05	0.35	
MW33C-15	317135.17	4833962.66	7.010	4.570	6.850	Sandy Silt/Sand (FILL)	77.150	78.160	70.140	2.950	1.950	75.210	0.005	Downward Gradient	0.54	0.05	0.3	0.3	3.25	2.25	74.91	0.015	Downward Gradient	0.54	0.05	0.3	1
MW33B-15	317133.99	4833961.99	10.360	7.920	10.360	Sand (NATIVE)	77.110	78.050	66.750	2.950	2.010	75.100	0.032	Downward Gradient	41.14	4.11	0.35	139	3.4	2.46	74.65	0.077	Downward Gradient	41.14	4.11	0.35	329
MW33A-15	317133.01	4833961.28	20.110	16.450	20.110	Bedrock	77.160	77.070	57.050	-	-	-			1.87	0.19	0.02		2.39	2.48	74.68	-0.003	Upward Gradient	1.87	0.19	0.02	11
MW34D-15	317222.144	4833996.19	6.100	4.270	6.100	Gravelly Sand/Silt (FILL)	79.119	80.158	73.019	5.360	4.321	74.798			3.44	0.34	0.3		5.45	4.41	74.71			3.44	0.34	0.3	
MW34C-15	317223.071	4833996.76	10.670	7.010	10.670	Peat/Silty Clay (NATIVE)	79.105	80.136	68.435	5.020	3.989	75.116	-0.069	Upward Gradient	45.20	4.52	0.4	286	5.43	4.4	74.71	0.000	No Gradient	45.20	4.52	0.4	0
MW34B-15	317224.159	4833997.58	13.720	10.060	13.720	Sand Fill/Silty Sand (NATIVE)	79.076	80.095	65.356	4.970	3.951	75.125	-0.003	Upward Gradient	41.14	4.11	0.35	13	5.38	4.36	74.72	-0.003	Upward Gradient	41.14	4.11	0.35	14
MW34A-15	317225.218	4833998.43	21.200	17.380	21.200	Bedrock	79.017	80.123	57.817	5.120	4.014	75.003	0.016	Downward Gradient	1.87	0.19	0.02	55	5.57	4.46	74.55	0.023	Downward Gradient	1.87	0.19	0.02	77
MW35D-15*	317221.088	4833892.04	12.800	9.150	12.800	Sand (FILL)	80.069	80.844	67.269	5.720	4.945	75.124			57.37	5.74	0.35		6.13	5.35	74.71			57.37	5.74	0.35	
MW35C-15	317221.376	4833891.91	6.100	4.270	6.100	Silty Clay (FILL)	80.066	80.976	73.966	5.100	4.190	75.876	0.112	Downward Gradient	0.41	0.04	0.3	6	5.23	4.32	75.75	0.155	Downward Gradient	0.41	0.04	0.3	8
MW35B-15	317220.8	4833892.17	9.760	6.100	9.760	Peat/Silty Clay (NATIVE)	80.071	80.966	70.311	5.850	4.955	75.116	0.208	Downward Gradient	45.20	4.52	0.4	858	6.27	5.38	74.7	0.287	Downward Gradient	45.20	4.52	0.4	1185
MW35A-15	316537.407	4833741.66	23.020	19.360	23.020	Bedrock	77.169	77.098	54.149	1.960	2.031	75.138	-0.001	Upward Gradient	0.98	0.10	0.02	2	2.41	2.48	74.69	0.001	Downward Gradient	0.98	0.10	0.02	1
MW36D-15	316492.448	4833472.65	3.050	1.220	3.050	Sand (FILL)/Sand (NATIVE)	76.469	76.397	73.419	1.210	1.282	75.187			57.36	5.74	0.35		1.57	1.64	74.83			57.36	5.74	0.35	
MW36C-15	316489.966	4833471.95	6.100	2.440	6.100	Sand (NATIVE)	76.451	76.362	70.351	1.190	1.279	75.172	0.005	Downward Gradient	41.14	4.11	0.35	21	1.5	1.59	74.86	-0.010	Upward Gradient	41.14	4.11	0.35	42
MW36B-15	316488.191	4833471.46	10.670	7.010	10.670	Sand (NATIVE)	76.488	76.406	65.818	1.230	1.312	75.176	-0.001	Upward Gradient	41.14	4.11	0.35	4	1.55	1.63	74.86	0.000	No Gradient	41.14	4.11	0.35	0
MW36A-15	316491.211	4833472.29	21.540	17.680	21.540	Bedrock	76.428	76.323	54.888	1.260	1.365	75.063	0.010	Downward Gradient	1.87	0.19	0.02	35	1.83	1.94	74.49	0.034	Downward Gradient	1.87	0.19	0.02	116
MW37D-15	316665.112	4833585.73	3.050	1.520	3.050	Sand to Sandy Silt Fill/Sand (FILL)	76.446	76.382	73.396	1.220	1.284	75.162			57.37	5.74	0.35		1.57	1.63	74.81			57.37	5.74	0.35	
MW37C-15	316664.119	4833585.28	7.620	3.960	7.620	Sand (FILL)	76.453	76.373	68.833	1.220	1.300	75.153	0.002	Downward Gradient	41.14	4.11	0.35	8	1.55	1.63	74.82	-0.002	Upward Gradient	41.14	4.11	0.35	9
MW37B-15	316663.224	4833584.84	10.670	7.010	10.670	Sand (FILL)	76.451	76.381	65.781	1.220	1.290	75.161	-0.003	Upward Gradient	41.14	4.11	0.35	11	1.58	1.65	74.8	0.007	Downward Gradient	41.14	4.11	0.35	28
MW37A-15**	316662.206	4833584.31	23.100	19.510	23.100	Bedrock	76.457	76.273	53.357	1.850	2.034	74.423	0.059	Downward Gradient	1.87	0.19	0.02	203	-	-	-			1.87	0.19	0.02	
MW38C-15	316937.49	4833535.74	3.040	1.210	3.040	Silty Sand/Sand/Silty Sand (FILL)	76.970	77.830	73.930	-	-	-			34.82	3.48	0.3		2.56	1.7	75.27			34.82	3.48	0.3	
MW38B-15	316938.21	4833534.24	6.700	4.260	6.700	Peat/Sand (NATIVE)	76.970	77.820	70.270	-	-	-			11.84	1.18	0.35		3.09	2.24	74.73	0.148	Downward Gradient	11.84	1.18	0.35	182
MW38A-15	316938.74	4833533.08	9.750	8.530	9.140	Sand (NATIVE)	76.970	77.850	67.220	-	-	-			41.14	4.11	0.3		3.13	2.24	74.72	0.003	Downward Gradient	41.14	4.11	0.3	16
MW39D-15	317100.827	4834259.29	3.050	1.220	3.050	Sand/Silty Clay/Peat (NATIVE)	76.547	77.517	73.497	2.410	1.440	75.107			57.36	5.74	0.4		2.77	1.8	74.75			57.36	5.74	0.4	
MW39C-15	317101.505	4834258.02	7.620	3.960	7.620	Peat/Silty Clay (NATIVE)	76.544	77.584	68.924	2.450	1.410	75.134	-0.006	Upward Gradient	45.20	4.52	0.4	24	2.9	1.86	74.68	0.015	Downward Gradient	45.20	4.52	0.4	63
MW39B-15	317102.203	4834256.99	10.670	7.010	10.670	Silty Clay/Silty Sand/Gravelly Sand/Shale (NATIVE)	76.498	77.480	65.828	2.360	1.378	75.120	0.005	Downward Gradient	45.20	4.52	0.3	25	2.8	1.82	74.68	0.000	No Gradient	45.20	4.52	0.3	0
MW39A-15	317102.825	4834256.14	15.850	12.200	15.850	Bedrock	76.514	77.487	60.664	2.390	1.417	75.097	0.004	Downward Gradient	1.87	0.19	0.02	15	2.82	1.85	74.67	0.002	Downward Gradient	1.87	0.19	0.02	7
MW40D-15	317305.962	4834284.53	3.050	1.220	3.050	Gravel Fill/Clay (FILL)	76.929	77.805	73.879	2.390	1.514	75.415			0.41	0.04	0.3		2.57	1.69	75.24			0.41	0.04	0.3	
MW40C-15	317305.072	4834285.52	6.100	2.440	6.100	Silt/Sandy Silt/Silt/Sandy Silt (FILL)	76.904	77.660	70.804	2.430	1.674	75.230	0.060	Downward Gradient	0.54	0.05	0.3	4	2.78	2.02	74.88	0.117	Downward Gradient	0.54	0.05	0.3	8
MW40B-15	317304.412	4834286.52	10.570	7.010	10.570	Silty Sand/Sand (FILL)	76.890	77.719	66.320	2.570	1.741	75.149	0.018	Downward Gradient	15.28	1.53	0.35	29	2.99	2.16	74.73	0.033	Downward Gradient	15.28	1.53	0.35	53
MW40A-15	317303.743	4834287.94	16.240	12.590	16.240	Bedrock	76.812	77.693	60.572	2.540	1.659	75.153	-0.001	Upward Gradient	1.87	0.19	0.02	2	2.96	2.08	74.73	0.000	No Gradient	1.87	0.19	0.02	0

Notes:

(1) Reference elevation taken from top of riser pipe.

* Elevations for MW35D-15 are approximate.

** Monitoring well casing damaged.

mamsl metres above mean sea level. Elevations referenced with respect to benchmark.

mbgs metres below ground surface

mBTOR metres Below Top of Riser

Lake Ontario Water Level Elevation 75.017 mASL on September 1, 2015 at Station Number 13320.

Effective Porosity values referenced from Sara, Martin, N.2003. Site Assessment and Remediation Handbook (2nd ed.) CRC Press LLC, 501p.

Table A9. Contaminants of Concern Identified in Soil

Port Lands, Toronto, ON

Parameter Group	Parameter	Table 9 Standard [a]	Unit	Maximum Concentration Exceeding Table 9 Standards		Reason Retained as COC
				Detected	Not Detected	
ABN	1,1'-Biphenyl	0.05	µg/g	-	1	MDL Exceeds Table 9 Standards
	1,2,4-Trichlorobenzene	0.05	µg/g	-	2	MDL Exceeds Table 9 Standards
	2,4-Dimethylphenol	0.2	µg/g	-	1	MDL Exceeds Table 9 Standards
	2,4-Dinitrotoluene	0.5	µg/g	-	1	MDL Exceeds Table 9 Standards
	2-Chlorophenol	0.1	µg/g	-	1	MDL Exceeds Table 9 Standards
	3,3`-Dichlorobenzidine	1	µg/g	-	9.99	MDL Exceeds Table 9 Standards
	4-Chloroaniline	0.5	µg/g	-	2	MDL Exceeds Table 9 Standards
	Bis (2-chloroethyl) ether	0.5	µg/g	-	2	MDL Exceeds Table 9 Standards
	bis (2-Chloroisopropyl) ether	0.5	µg/g	-	1	MDL Exceeds Table 9 Standards
	Diethylphthalate	0.5	µg/g	-	2	MDL Exceeds Table 9 Standards
	Dimethylphthalate	0.5	µg/g	-	2	MDL Exceeds Table 9 Standards
	Phenol	0.5	µg/g	-	2	MDL Exceeds Table 9 Standards
CP	2,4,5-Trichlorophenol	0.1	µg/g	-	1	MDL Exceeds Table 9 Standards
	2,4,6-Trichlorophenol	0.1	µg/g	-	1	MDL Exceeds Table 9 Standards
	2,4-Dichlorophenol	0.1	µg/g	-	1	MDL Exceeds Table 9 Standards
	Pentachlorophenol	0.1	µg/g	-	2	MDL Exceeds Table 9 Standards
CHEMISTRY	Ammonia	-	µg/g	157	-	Parameter with no Standard, detected above MDL
	Bromide	-	µg/g	4.99	3	Parameter with no Standard, detected above MDL
	Chlorite	-	µg/g	500000	-	Parameter with no Standard, detected above MDL
	Perchlorate	-	µg/g	0.82	-	Parameter with no Standard, detected above MDL
	Sulfate	-	µg/g	132	-	Parameter with no Standard, detected above MDL
INORGANIC	Antimony	1.3	µg/g	669	1.6	Concentration Detected above Table 9 Standards
	Arsenic	18	µg/g	902	-	Concentration Detected above Table 9 Standards
	Barium	220	µg/g	29200	-	Concentration Detected above Table 9 Standards
	Beryllium	2.5	µg/g	50	9.99	Concentration Detected above Table 9 Standards
	Boron	36	µg/g	1000	100	Concentration Detected above Table 9 Standards
	Boron (hot water extractable)	1.5	µg/g	7.38	-	Concentration Detected above Table 9 Standards
	Cadmium	1.2	µg/g	476	-	Concentration Detected above Table 9 Standards
	Chromium	70	µg/g	1350	-	Concentration Detected above Table 9 Standards
	Chromium, Hexavalent (Cr6+)	0.66	µg/g	6	1	Concentration Detected above Table 9 Standards
	Cobalt	22	µg/g	168	-	Concentration Detected above Table 9 Standards
	Copper	92	µg/g	73000	-	Concentration Detected above Table 9 Standards
	Cyanide	0.051	µg/g	1	1	Concentration Detected above Table 9 Standards
	Electrical Conductivity	0.7	mS/cm	5.85	-	Concentration Detected above Table 9 Standards
	Lead	120	µg/g	74700	-	Concentration Detected above Table 9 Standards
	Mercury	0.27	µg/g	14.5	-	Concentration Detected above Table 9 Standards
	Molybdenum	2	µg/g	250	75	Concentration Detected above Table 9 Standards
	Nickel	82	µg/g	841	-	Concentration Detected above Table 9 Standards
	Selenium	1.5	µg/g	250	270	MDL Exceeds Table 9 Standards
	Silver	0.5	µg/g	744	0.69	Concentration Detected above Table 9 Standards
	Sodium Absorption Ratio	5	None	53	-	Concentration Detected above Table 9 Standards
	Thallium	1	µg/g	3.8	2	Concentration Detected above Table 9 Standards
	Uranium (U)	2.5	µg/g	12.3	-	Concentration Detected above Table 9 Standards
	Vanadium	86	µg/g	425	-	Concentration Detected above Table 9 Standards
	Zinc	290	µg/g	78000	-	Concentration Detected above Table 9 Standards
	Calcium	49000 [b.]	µg/g	144000	-	Parameter with no Standard, Concentration Detected above OTR
	Chloride (Cl)	130 [b.]	µg/g	231	347	Parameter with no Standard, Concentration Detected above OTR
	Magnesium	15000 [b.]	µg/g	71599.99	-	Parameter with no Standard, Concentration Detected above OTR
	Sodium	180 [b.]	µg/g	370	-	Parameter with no Standard, Concentration Detected above OTR
	Strontium	77 [b.]	µg/g	109	-	Parameter with no Standard, Concentration Detected above OTR
OCP	Hexachlorobenzene	0.02	µg/g	-	2	MDL Exceeds Table 9 Standards
	Hexachlorobutadiene	0.01	µg/g	-	1	MDL Exceeds Table 9 Standards
	Hexachloroethane	0.01	µg/g	-	1	MDL Exceeds Table 9 Standards
PAH	1+2-Methylnaphthalenes	0.59	µg/g	8200	2	Concentration Detected above Table 9 Standards
	Acenaphthene	0.072	µg/g	2100	6	Concentration Detected above Table 9 Standards
	Acenaphthylene	0.093	µg/g	280	1.5	Concentration Detected above Table 9 Standards
	Anthracene	0.22	µg/g	970	1	Concentration Detected above Table 9 Standards
	Benzo(a)anthracene	0.36	µg/g	460	1	Concentration Detected above Table 9 Standards
	Benzo(a)pyrene	0.3	µg/g	330	1	Concentration Detected above Table 9 Standards
	Benzo(b&j)fluoranthene	0.47	µg/g	260	-	Concentration Detected above Table 9 Standards
	Benzo(b)fluoranthene	0.47	µg/g	105	1	Concentration Detected above Table 9 Standards
	Benzo(g,h,i)perylene	0.68	µg/g	130	1	Concentration Detected above Table 9 Standards
	Benzo(k)fluoranthene	0.48	µg/g	93	9.99	Concentration Detected above Table 9 Standards
	Chrysene	2.8	µg/g	390	-	Concentration Detected above Table 9 Standards
	Dibenzo(a,h)anthracene	0.1	µg/g	35	9.99	Concentration Detected above Table 9 Standards
	Fluoranthene	0.69	µg/g	1000	9.99	Concentration Detected above Table 9 Standards
	Fluorene	0.19	µg/g	1100	9.99	Concentration Detected above Table 9 Standards
	Indeno(1,2,3-Cd)Pyrene	0.23	µg/g	110	1	Concentration Detected above Table 9 Standards
	Naphthalene	0.09	µg/g	8700	5	Concentration Detected above Table 9 Standards
	Phenanthrene	0.69	µg/g	3100	9.99	Concentration Detected above Table 9 Standards
	Pyrene	1	µg/g	1400	-	Concentration Detected above Table 9 Standards
PCB	PCB, Total	0.3	µg/g	0.6	9.99	Concentration Detected above Table 9 Standards

Table A9. Contaminants of Concern Identified in Soil

Port Lands, Toronto, ON

Parameter Group	Parameter	Table 9 Standard [a]	Unit	Maximum Concentration Exceeding Table 9 Standards		Reason Retained as COC
				Detected	Not Detected	
PHC	F1 (C6-C10)	25	µg/g	14700	400	Concentration Detected above Table 9 Standards
	F2 (C10-C16)	10	µg/g	51000	50	Concentration Detected above Table 9 Standards
	F3 (C16-C34)	240	µg/g	48000	-	Concentration Detected above Table 9 Standards
	F4 (C34-C50)	120	µg/g	44000	250	Concentration Detected above Table 9 Standards
VOC	1,1,1,2-Tetrachloroethane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,1,1-Trichloroethane	0.05	µg/g	38	180	Concentration Detected above Table 9 Standards
	1,1,2,2-Tetrachloroethane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,1,2-Trichloroethane	0.05	µg/g	10	370	Concentration Detected above Table 9 Standards
	1,1-Dichloroethane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,1-Dichloroethene	0.05	µg/g	10	44	Concentration Detected above Table 9 Standards
	1,2-Dibromoethane	0.05	µg/g	17600	92	Concentration Detected above Table 9 Standards
	1,2-Dichlorobenzene	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,2-Dichloroethane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,2-Dichloropropane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,3-Dichlorobenzene	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	1,3-Dichloropropene	0.05	µg/g	20	184	Concentration Detected above Table 9 Standards
	1,4-Dichlorobenzene	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	2-Butanone	0.5	µg/g	8550	2800	Concentration Detected above Table 9 Standards
	4-Methyl-2-Pentanone	0.5	µg/g	12600	1800	Concentration Detected above Table 9 Standards
	Acetone	0.5	µg/g	500	2800	Concentration Detected above Table 9 Standards
	Benzene	0.02	µg/g	35900	92	Concentration Detected above Table 9 Standards
	Bromodichloromethane	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	Bromoform	0.05	µg/g	10	370	Concentration Detected above Table 9 Standards
	Bromomethane	0.05	µg/g	20	370	Concentration Detected above Table 9 Standards
	Carbon tetrachloride	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	Chlorobenzene	0.05	µg/g	10	92	Concentration Detected above Table 9 Standards
	Chlorodibromomethane	0.05	µg/g	81599.99	180	Concentration Detected above Table 9 Standards
	Chloroform	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	cis-1,2-Dichloroethene	0.05	µg/g	10	180	Concentration Detected above Table 9 Standards
	Dichlorodifluoromethane	0.05	µg/g	-	4	MDL Exceeds Table 9 Standards
	Dichloromethane	0.05	µg/g	12800	180	Concentration Detected above Table 9 Standards
	Ethylbenzene	0.05	µg/g	16799.99	20	Concentration Detected above Table 9 Standards
	Methyl tert-butyl ether (MTBE)	0.05	µg/g	13000	370	Concentration Detected above Table 9 Standards
	n-Hexane	0.05	µg/g	98.4	2	Concentration Detected above Table 9 Standards
	Styrene	0.05	µg/g	13500	180	Concentration Detected above Table 9 Standards
	Tetrachloroethene	0.05	µg/g	13300	180	Concentration Detected above Table 9 Standards
	Toluene	0.2	µg/g	71500	6.4	Concentration Detected above Table 9 Standards
	trans-1,2-Dichloroethene	0.05	µg/g	60099.99	180	Concentration Detected above Table 9 Standards
	Trichloroethylene	0.05	µg/g	13300	180	Concentration Detected above Table 9 Standards
	Trichlorofluoromethane	0.25	µg/g	12500	18.99	Concentration Detected above Table 9 Standards
	Vinyl Chloride	0.02	µg/g	8540	55	Concentration Detected above Table 9 Standards
	Xylenes, Total	0.05	µg/g	116000	1.8	Concentration Detected above Table 9 Standards
Other SVOC	2-Chloroethyl Vinyl Ether	-	µg/g	-	97	Parameter with no Standard, not dectected, elevated MDL
	2-Hexanone	-	µg/g	-	0.47	Parameter with no Standard, not dectected, elevated MDL
	Chloroethane	-	µg/g	0.005	18.99	Parameter with no Standard, elevated MDL
	Chloromethane	-	µg/g	-	18.99	Parameter with no Standard, elevated MDL

Notes:

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011.
Table 9: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.

[b.] No MOECC Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011.

Table A10. Contaminants of Concern Identified in Groundwater

Port Lands, Toronto, ON

Parameter Group	Parameter	Table 9 Standard [a]	Unit	Maximum Concentration Exceeding Table 9 Standards		Reason Retained as COC
				Detected	Not Detected	
INORGANIC	Barium (Ba)-Dissolved	23000	µg/L	42300	-	Concentration Detected above Table 9 Standards
	Chloride (Cl)	1800000	µg/L	14000000	-	Concentration Detected above Table 9 Standards
	Silver (Ag)-Dissolved	1.2	µg/L	-	5	MDL Exceeds Table 9 Standards
	Sodium (Na)-Dissolved	1800000	µg/L	7330000	-	Concentration Detected above Table 9 Standards
PAH	1+2-Methylnaphthalenes	1500	µg/L	69100	-	Concentration Detected above Table 9 Standards
	Acenaphthene	600	µg/L	21400	-	Concentration Detected above Table 9 Standards
	Acenaphthylene	1.4	µg/L	2210	2	Concentration Detected above Table 9 Standards
	Anthracene	1	µg/L	10400	-	Concentration Detected above Table 9 Standards
	Benzo(a)anthracene	1.8	µg/L	4720	-	Concentration Detected above Table 9 Standards
	Benzo(a)pyrene	0.81	µg/L	3090	-	Concentration Detected above Table 9 Standards
	Benzo(b)fluoranthene	0.75	µg/L	2530	-	Concentration Detected above Table 9 Standards
	Benzo(g,h,i)perylene	0.2	µg/L	1050	-	Concentration Detected above Table 9 Standards
	Benzo(k)fluoranthene	0.4	µg/L	833	-	Concentration Detected above Table 9 Standards
	Chrysene	0.7	µg/L	4270	-	Concentration Detected above Table 9 Standards
	Dibenzo(a,h)anthracene	0.4	µg/L	270	20	Concentration Detected above Table 9 Standards
	Fluoranthene	73	µg/L	8900	-	Concentration Detected above Table 9 Standards
	Fluorene	290	µg/L	9800	-	Concentration Detected above Table 9 Standards
	Indeno(1,2,3-Cd)Pyrene	0.2	µg/L	1010	-	Concentration Detected above Table 9 Standards
	Naphthalene	1400	µg/L	64500	-	Concentration Detected above Table 9 Standards
	Phenanthrene	380	µg/L	33800	-	Concentration Detected above Table 9 Standards
	Pyrene	5.7	µg/L	13300	-	Concentration Detected above Table 9 Standards
PHC	F1 (C6-C10)	420	µg/L	13400	1700	Concentration Detected above Table 9 Standards
	F2 (C10-C16)	150	µg/L	12000000	6700	Concentration Detected above Table 9 Standards
	F3 (C16-C34)	500	µg/L	13000000	1300	Concentration Detected above Table 9 Standards
	F4 (C34-C50)	500	µg/L	1100000	2000	Concentration Detected above Table 9 Standards
VOC	1,1,1,2-Tetrachloroethane	3.3	µg/L	-	10	MDL Exceeds Table 9 Standards
	1,1,2,2-Tetrachloroethane	3.2	µg/L	-	10	MDL Exceeds Table 9 Standards
	1,1,2-Trichloroethane	4.7	µg/L	-	10	MDL Exceeds Table 9 Standards
	1,1-Dichloroethene	1.6	µg/L	-	10	MDL Exceeds Table 9 Standards
	1,2-Dibromoethane	0.25	µg/L	-	4	MDL Exceeds Table 9 Standards
	1,2-Dichloroethane	1.6	µg/L	-	10	MDL Exceeds Table 9 Standards
	1,3-Dichloropropene	5.2	µg/L	-	8.5	MDL Exceeds Table 9 Standards
	1,4-Dichlorobenzene	8	µg/L	-	10	MDL Exceeds Table 9 Standards
	Benzene	44	µg/L	1880	-	Concentration Detected above Table 9 Standards
	Bromomethane	5.6	µg/L	-	10	MDL Exceeds Table 9 Standards
	Carbon tetrachloride	0.79	µg/L	-	4	MDL Exceeds Table 9 Standards
	Chloroform	2.4	µg/L	-	40	MDL Exceeds Table 9 Standards
	cis-1,2-Dichloroethene	1.6	µg/L	474	10	Concentration Detected above Table 9 Standards
	Ethylbenzene	1800	µg/L	4740	-	Concentration Detected above Table 9 Standards
	n-Hexane	51	µg/L	85.9	-	Concentration Detected above Table 9 Standards
	Tetrachloroethene	1.6	µg/L	-	10	MDL Exceeds Table 9 Standards
	trans-1,2-Dichloroethene	1.6	µg/L	10.3	10	Concentration Detected above Table 9 Standards
	Trichloroethylene	1.6	µg/L	-	10	MDL Exceeds Table 9 Standards
	Vinyl Chloride	0.5	µg/L	522	10	Concentration Detected above Table 9 Standards
	Xylenes, Total	3300	µg/L	6510	-	Concentration Detected above Table 9 Standards

Notes:

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011.

Table 9: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.

Table A11. Soil Exceedances within the River Valley Cut Areas

Port Lands, Toronto, ON

Phase	Analyte Group	Number of Locations	Number of Samples				Percent of samples Exceeding Criteria		
			Total	Exceeds Table 9	Exceeds Table 3	Exceeds S-GW3	Table 9	Table 3	S-GW3
1	PHCs	26	62	55	46	39	89%	74%	63%
	VOCs	26	66	53	46	16	80%	70%	24%
	PAHs	26	58	46	38	24	79%	66%	41%
	Inorganics	26	59	17	17	16	29%	29%	27%
2A	PHCs	26	52	22	7	1	42%	13%	2%
	VOCs	26	56	18	7	0	32%	13%	0%
	PAHs	27	48	21	16	6	44%	33%	13%
	Inorganics	27	52	28	28	6	54%	54%	12%
2B	PHCs	8	17	8	3	0	47%	18%	0%
	VOCs	8	21	6	2	0	29%	10%	0%
	PAHs	8	17	7	3	0	41%	18%	0%
	Inorganics	8	18	8	8	2	44%	44%	11%
2C	PHCs	3	8	3	1	0	38%	13%	0%
	VOCs	3	8	3	0	0	38%	0%	0%
	PAHs	4	9	2	2	1	22%	22%	11%
	Inorganics	4	10	2	2	0	20%	20%	0%
	PCBs	1	1	0	0	0	0%	0%	0%
3	PHCs	28	44	30	20	9	68%	45%	20%
	VOCs	30	57	27	25	9	47%	44%	16%
	PAHs	33	45	32	27	14	71%	60%	31%
	Inorganics	32	49	29	22	0	59%	45%	0%
	PCBs	7	9	0	0	0	0%	0%	0%
	ABNs	16	8	3	3	0	38%	38%	0%
	OCPs	3	3	3	3	0	100%	100%	0%
	SVOCs	7	8	0	0	0	0%	0%	0%
4A	PHCs	4	8	6	5	0	75%	63%	0%
	VOCs	4	8	4	1	0	50%	13%	0%
	PAHs	3	7	4	4	2	57%	57%	29%
	Inorganics	7	15	8	7	0	53%	47%	0%
	PCBs	1	1	0	0	0	0%	0%	0%
4B	PHCs	8	20	15	11	10	75%	55%	50%
	VOCs	8	22	17	17	5	77%	77%	23%
	PAHs	9	20	13	9	3	65%	45%	15%
	Inorganics	9	21	8	7	1	38%	33%	5%
	PCBs	1	1	0	0	0	0%	0%	0%
4C	PHCs	1	1	1	1	1	100%	100%	100%
	VOCs	1	1	1	1	1	100%	100%	100%
	PAHs	1	1	1	1	1	100%	100%	100%
	Inorganics	1	1	1	1	0	100%	100%	0%
	ABNs	1	1	1	1	1	100%	100%	100%
	CPs	1	1	1	1	0	100%	100%	0%
	OCPs	1	1	1	1	0	100%	100%	0%

Notes:

Exceedances of S-GW3 only account for those parameters with values equal or greater than Table 9 and 3 Standards.

No Standards exist for the parameters categorized under SVOCs

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011.
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011.
S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

Table A12. Groundwater Exceedances within the River Valley Cut Areas

Port Lands, Toronto, ON

Phase	Analyte Group	Number of Locations	Number of Samples			Percent of samples Exceeding Criteria	
			Total	Exceeds Table 9	Exceeds Table 3	Table 9	Table 3
1	PHCs	15	17	15	15	88%	88%
	VOCs	11	12	9	9	75%	75%
	PAHs	11	12	4	4	33%	33%
	Inorganics	11	12	1	1	8%	8%
2A	PHCs	12	12	5	5	42%	42%
	VOCs	12	12	4	4	33%	33%
	PAHs	12	12	3	3	25%	25%
	Inorganics	12	12	0	0	0%	0%
2B	PHCs	3	4	4	4	100%	100%
	VOCs	3	4	0	0	0%	0%
	PAHs	3	4	3	3	75%	75%
	Inorganics	3	4	0	0	0%	0%
2C	PHCs	4	4	1	1	25%	25%
	VOCs	4	4	0	0	0%	0%
	PAHs	4	4	1	1	25%	25%
	Inorganics	4	4	0	0	0%	0%
3	PHCs	15	22	10	10	45%	45%
	VOCs	18	18	14	14	78%	78%
	PAHs	19	19	7	6	37%	32%
	Inorganics	18	18	6	6	33%	33%
	ABN	5	5	0	0	0%	0%
	OCP	5	5	5	5	100%	100%
	SVOC	10	7	0	0	0%	0%
	PCB	4	4	0	0	0%	0%
4A	PHCs	2	2	1	1	50%	50%
	VOCs	2	2	0	0	0%	0%
	PAHs	2	2	1	1	50%	50%
	Inorganics	3	3	0	0	0%	0%
	SVOC	2	2	0	0	0%	0%
4B	PHCs	5	6	5	5	83%	83%
	VOCs	5	6	6	6	100%	100%
	PAHs	5	6	2	2	33%	33%
	Inorganics	5	6	2	2	33%	33%
4C	PHCs	1	1	1	1	100%	100%
	VOCs	1	1	1	1	100%	100%
	PAHs	1	1	1	1	100%	100%
	Inorganics	1	1	0	0	0%	0%
	ABN	1	1	0	0	0%	0%
	CP	1	1	0	0	0%	0%
	OCP	1	1	0	0	0%	0%
	PCB	1	1	0	0	0%	0%

Notes:

Historical groundwater was included in this assessment as some areas had limited data from the recent GHD investigation (2015; 2016)

No Standards exist for the parameters categorized under SVOCs

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011.
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

Appendix A1
Summary of Soil Analytical Results

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH100-15	BH100-15	BH100-15	BH101-15	BH101-15	BH101-15	BH102-15	BH102-15	BH102-15	BH102-15	BH103-15	BH103-15	BH103-15	BH104-15	BH104-15	BH104-15	BH105-15	BH105-15	BH105-15
					Sample ID	S-11102463-081715-LG-253	S-11102463-081715-LG-254	S-11102463-081715-LG-255	S-11102463-082515-LG-282	S-11102463-082515-LG-283	S-11102463-082515-LG-284	S-11102463-082115-TB-454	S-11102463-082115-TB-455	S-11102463-082115-TB-456	S-11102463-082115-TB-457	S-11102463-082115-TB-458	S-11102463-082115-TB-459	S-11102463-082115-TB-460	S-11102463-082415-TB-465	S-11102463-082415-TB-466	S-11102463-082415-TB-467	S-11102463-082015-TB-448	S-11102463-082015-TB-449	S-11102463-082015-TB-450
					Start Depth	4.57	6.09	9.9	1.52	3.05	6.1	2.29	2.29	3.05	6.86	1.52	4.57	6.86	3.05	3.81	6.86	1.52	3.81	6.85
					End Depth	5.18	6.7	10.51	2.13	3.66	6.71	2.9	2.9	3.66	7.47	2.13	5.18	7.47	3.66	4.42	7.47	2.13	4.41	7.46
					Date	17 Aug 2015	17 Aug 2015	17 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**33.4**	**47.8**	**41.1**	**16.5**	**20.1**	**40.9**	**16.8**	**17.6**	**21.2**	**76.8**	**13.9**	**37.8**	**70.8**	**18**	**47.2**	**21.6**	**17.1**	**19.3**	**63.2**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.56**	**7.03**	**7**	**7.87**	**7.66**	**7.08**	**7.61**	**7.47**	**7.6**	**6.87**	**8.23**	**7.26**	**6.91**	**7.54**	**6.96**	**7.4**	**8.75**	**7.72**	**7.16**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	**1.4**	1 U	1 U	**1.1**	**4.2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.7**	**6.7**	1 U	**8.8**	**1.4**	**1.8**	**3.1**	**2.7**	**4.6**	**3.3**	**1.3**	**8.2**	1 U	**1.2**	**2.1**	1 U	**6.1**	**1.4**	**3.6**
INORGANIC	Barium	µg/g	220	390		**29**	**97.3**	**7.4**	**146**	**22.9**	**124**	**59.7**	**54.5**	**48.6**	**82.9**	**29**	**49.9**	**12.9**	**22.4**	**83.7**	**6.7**	**41.1**	**16**	**51.5**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**5**	**9.1**	5 U	**14.9**	5 U	**7.2**	**6.9**	**6.2**	**8.2**	**8**	**5.3**	**7.9**	5 U	5 U	**5.3**	5 U	**10.3**	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**1.91**	**1.03**	**0.1**	**3.58**	**0.29**	**0.46**	**1.33**	**1.14**	**1.24**	**2.38**	**1.1**	**1.51**	**0.58**	**0.26**	**1.58**	0.1 U	**4.28**	**0.42**	**1.4**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.59**	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**9**	**21.5**	**3.6**	**19.4**	**5.5**	**17.4**	**12.8**	**10**	**9.1**	**9**	**10.5**	**13.3**	**4.3**	**5.7**	**9.8**	**2.8**	**17.4**	**4.4**	**7.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
INORGANIC	Cobalt	µg/g	22	22		**3.6**	**6.8**	**1.2**	**5.1**	**2**	**6.4**	**3.7**	**3.4**	**4.4**	**2.4**	**3.1**	**4**	**1.1**	**2.5**	**3.7**	1 U	**3.1**	**1.8**	**2.8**
INORGANIC	Copper	µg/g	92	140		**7.3**	**18.9**	**2.2**	**54**	**4.1**	**13.2**	**15.5**	**19.5**	**35.2**	**12.2**	**8.5**	**12.4**	**2.1**	**4.5**	**6.9**	**1.5**	**29.9**	**3.6**	**8.8**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.26**	**0.57**	**0.12**	**0.51**	**0.21**	**0.39**	**0.55**	**0.52**	**2.4**	**0.2**	**0.51**	**0.76**	**0.74**	**0.22**	**0.48**	**0.11**	**2.56**	**0.29**	**0.88**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**13.7**	**10.8**	**2.4**	**117**	**7.4**	**7.3**	**85.2**	**86.7**	**524**	**4.9**	**37.7**	**15.4**	**3.8**	**6.9**	**4.3**	**1.9**	**182**	**2.7**	**11.5**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.03**	**0.04**	0.005 U	**0.17**	**0.0097**	**0.01**	**0.56**	**0.79**	**0.17**	**0.02**	**0.01**	**0.04**	**0.0071**	**0.01**	**0.02**	0.005 U	**5.31 D**	**0.01**	**0.07**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	**1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.6**	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**7.5**	**15.9**	**2.9**	**15.6**	**4**	**14.2**	**11.3**	**17.5**	**63.9**	**11.4**	**6.3**	**9.8**	**3.2**	**5.8**	**8**	**2.3**	**27.6**	**3.7**	**7.7**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.6**	**1.74**	**0.19**	**0.85**	**0.5**	**0.26**	**0.45**	**0.24**	**0.14**	**1.69**	**0.57**	**1.75**	**1.7**	**0.97**	**1.47**		**0.36**	**0.94**	**0.68**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**12.8**	**27.1**	**4.8**	**23.2**	**8.7**	**23.8**	**21.2**	**22.2**	**86.3**	**12.8**	**21.3**	**17.7**	**8.7**	**8.9**	**13.9**	**6**	**37.1**	**7.6**	**12.1**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.18**	0.05 U	**0.05**	**0.17**	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	**0.15**
INORGANIC	Zinc	µg/g	290	340		**22.2**	**42.9**	**8.5**	**142**	**11.5**	**33.2**	**55.3**	**68.1**	**63.7**	**37.8**	**28.5**	**28.8**	**8.1**	**18**	**20.9**	**6.6**	**87.5**	**9.9**	**19.8**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH100-15	BH100-15	BH100-15	BH101-15	BH101-15	BH101-15	BH102-15	BH102-15	BH102-15	BH102-15	BH103-15	BH103-15	BH103-15	BH104-15	BH104-15	BH104-15	BH105-15	BH105-15	BH105-15
					Sample ID	S-11102463-081715-LG-253	S-11102463-081715-LG-254	S-11102463-081715-LG-255	S-11102463-082515-LG-282	S-11102463-082515-LG-283	S-11102463-082515-LG-284	S-11102463-082115-TB-454	S-11102463-082115-TB-455	S-11102463-082115-TB-456	S-11102463-082115-TB-457	S-11102463-082115-TB-458	S-11102463-082115-TB-459	S-11102463-082115-TB-460	S-11102463-082415-TB-465	S-11102463-082415-TB-466	S-11102463-082415-TB-467	S-11102463-082015-TB-448	S-11102463-082015-TB-449	S-11102463-082015-TB-450
					Start Depth	4.57	6.09	9.9	1.52	3.05	6.1	2.29	2.29	3.05	6.86	1.52	4.57	6.86	3.05	3.81	6.86	1.52	3.81	6.85
					End Depth	5.18	6.7	10.51	2.13	3.66	6.71	2.9	2.9	3.66	7.47	2.13	5.18	7.47	3.66	4.42	7.47	2.13	4.41	7.46
					Date	17 Aug 2015	17 Aug 2015	17 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**77.5**	**0.08**	**0.13**	**1.15**	0.042 U	0.042 U	**0.57**	**0.45**	**1.14**	0.13 U	**0.38**	0.042 U	0.13 U	0.042 U	0.042 U	0.042 U	**3.82**	0.042 U	0.085 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**76.8 D**	**0.08**	**0.13**	**0.51**	0.03 U	0.03 U	**0.22**	**0.18**	**0.4**	0.09 U	**0.17**	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	**1.52 D**	0.03 U	0.06 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.7 D**	0.03 U	0.03 U	**0.63**	0.03 U	0.03 U	**0.35**	**0.26**	**0.73**	0.09 U	**0.2**	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	**2.31 D**	0.03 U	0.06 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	**5.07 D**	**0.05**	0.05 U	**0.64**	0.05 U	0.05 U	**0.1**	**0.05**	**0.09**	0.15 U	**0.29**	**0.07**	0.15 U	0.05 U	**0.1**	0.05 U	0.5 U	0.05 U	0.1 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**1.02 D**	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.15 U	**0.11**	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	**1.66 D**	0.05 U	0.1 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**3.55 D**	0.05 U	0.05 U	**1.03**	**0.08**	0.05 U	**0.28**	**0.09**	**0.2**	0.15 U	**0.6**	**0.05**	0.15 U	0.05 U	0.05 U	0.05 U	**1.3 D**	0.05 U	0.1 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**2.32 D**	**0.09**	0.05 U	**7.68**	**0.71**	**0.1**	**1.01**	**0.24**	**0.8**	0.15 U	**1.12**	**0.14**	0.15 U	0.05 U	**0.09**	0.05 U	**4.72 D**	0.05 U	0.1 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**1.61 D**	**0.1**	0.05 U	**9.62**	**1.07**	**0.14**	**1.19**	**0.28**	**0.66**	0.15 U	**0.83**	**0.16**	0.15 U	0.05 U	**0.08**	0.05 U	**7.35 D**	0.05 U	0.1 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**1.2 D**	**0.11**	0.05 U	**13.5**	**1.57**	**0.18**	**1.19**	**0.21**	**0.49**	0.15 U	**1.17**	**0.18**	0.15 U	0.05 U	**0.08**	0.05 U	**4.81 D**	0.05 U	0.1 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**1.24 D**	**0.06**	0.05 U	**8.84**	**0.97**	**0.12**	**0.92**	**0.3**	**0.64**	0.15 U	**0.53**	**0.13**	0.15 U	0.05 U	**0.05**	0.05 U	**8.31 D**	0.05 U	0.1 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.5 U	0.05 U	0.05 U	**5.05**	**0.4**	0.05 U	**0.4**	0.05 U	**0.13**	0.15 U	**0.33**	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	**0.91 D**	0.05 U	0.1 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**3.39 D**	**0.12**	0.05 U	**8.88**	**0.84**	**0.11**	**1.21**	**0.42**	**1.6**	0.15 U	**1.12**	**0.17**	0.15 U	0.05 U	**0.11**	0.05 U	**9.32 D**	0.05 U	0.1 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.5 U	0.05 U	0.05 U	**2.25**	**0.24**	0.05 U	**0.2**	**0.06**	**0.16**	0.15 U	**0.14**	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	**1.35 D**	0.05 U	0.1 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**2.58 D**	**0.21**	**0.06**	**10.6**	**0.82**	**0.13**	**1.65**	**0.26**	**0.7**	0.15 U	**3.76**	**0.25**	**0.25 M**	**0.07**	**0.2**	0.05 U	**3.23 D**	**0.06**	0.1 U
PAH	Fluorene	µg/g	0.19	62	62	**7.32 D**	**0.05**	0.05 U	**0.42**	0.05 U	0.05 U	**0.15**	**0.06**	**0.12**	0.15 U	**0.45**	0.05 U	0.15 U	0.05 U	**0.05**	0.05 U	**0.74 D**	0.05 U	0.1 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.75 D**	**0.05**	0.05 U	**8.83**	**1.01**	**0.12**	**0.66**	**0.13**	**0.27**	0.15 U	**0.54**	**0.1**	0.15 U	0.05 U	0.05 U	0.05 U	**3.32 D**	0.05 U	0.1 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**1.78 D**	0.05 U	0.05 U	**0.94**	**0.05**	0.05 U	**0.12**	**0.06**	**0.19**	0.15 U	**0.32**	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	**0.65 D**	0.05 U	0.1 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**26.5 D**	**0.19**	**0.09**	**5.16**	**0.37**	**0.07**	**1.21**	**0.44**	**0.88**	0.15 U	**3.02**	**0.18**	**0.43 M**	0.05 U	**0.22**	0.05 U	**4.96 D**	0.05 U	0.1 U
PAH	Pyrene	µg/g	1	78	2600	**6.43 D**	**0.27**	**0.06**	**9.64**	**0.76**	**0.12**	**1.98**	**0.79**	**2.17**	0.15 U	**3**	**0.32**	**0.17 M**	**0.1**	**0.27**	0.05 U	**16.7 D**	**0.1**	0.1 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	**606 D**	5 U	5 U	**6.9**	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	20 U	5 U	5 U	5 U	5 U	5 U	10 U
PHC	F1-BTEX	µg/g	25	55	55	**606**	5 U	5 U	**6.6**	5 U	5 U	5 U	5 U	5 U	20 U	5 U	5 U	20 U	5 U	5 U	5 U	5 U	5 U	10 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**4670**	**11**	**11**	**29**	10 U	10 U	**75**	**37**	**43**	30 U	**28**	**15**	30 U	10 U	10 U	10 U	**1090 D**	10 U	**20 D**
PHC	F2-Naphth	µg/g	10	98	230	**4660**	**11**	**11**	**28**	10 U	10 U	**75**	**37**	**42**	30 U	**28**	**15**	30 U	10 U	10 U	10 U	**1090**	10 U	**20**
PHC	F3 (C16-C34)	µg/g	240	300		**6360**	**116**	50 U	**381**	50 U	50 U	**1570**	**707**	**624**	**150 M**	**444**	**122**	150 U	**77**	**89**	50 U	**25000 D**	50 U	**140 D**
PHC	F3-PAH	µg/g	240	300		**6320**	**115**	50 U	**309**	50 U	50 U	**1560**	**705**	**618**	**150**	**430**	**121**	150 U	**77**	**88**	50 U	**25000**	50 U	**140**
PHC	F4 (C34-C50)	µg/g	120	2800		**2080**	**50**	50 U	**344**	50 U	50 U	**1170**	**434**	**317**	150 U	**251**	**56**	150 U	**160**	**103**	50 U	**14300 D**	50 U	100 U
PHC	F4G-SG	µg/g	120	2800		**7240**						**4220**	**1320**	**970**		**1120**			**700**			**35100**		
PHC	**Chrom. to baseline at nC5No**	None				No U	Yes	Yes	Yes	Yes	Yes	**No**	**No**	**No**	Yes	**No**	Yes	Yes	**No**	Yes	Yes	No U	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**13700**	**177**	72 U	**761**	72 U	72 U	**2820**	**1180**	**984**	220 U	**723**	**193**	220 U	**237**	**192**	72 U	**40400**	72 U	**170**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	2.9 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH100-15	BH100-15	BH100-15	BH101-15	BH101-15	BH101-15	BH102-15	BH102-15	BH102-15	BH102-15	BH103-15	BH103-15	BH103-15	BH104-15	BH104-15	BH104-15	BH105-15	BH105-15	BH105-15
					Sample ID	S-11102463-081715-LG-253	S-11102463-081715-LG-254	S-11102463-081715-LG-255	S-11102463-082515-LG-282	S-11102463-082515-LG-283	S-11102463-082515-LG-284	S-11102463-082115-TB-454	S-11102463-082115-TB-455	S-11102463-082115-TB-456	S-11102463-082115-TB-457	S-11102463-082115-TB-458	S-11102463-082115-TB-459	S-11102463-082115-TB-460	S-11102463-082415-TB-465	S-11102463-082415-TB-466	S-11102463-082415-TB-467	S-11102463-082015-TB-448	S-11102463-082015-TB-449	S-11102463-082015-TB-450
					Start Depth	4.57	6.09	9.9	1.52	3.05	6.1	2.29	2.29	3.05	6.86	1.52	4.57	6.86	3.05	3.81	6.86	1.52	3.81	6.85
					End Depth	5.18	6.7	10.51	2.13	3.66	6.71	2.9	2.9	3.66	7.47	2.13	5.18	7.47	3.66	4.42	7.47	2.13	4.41	7.46
					Date	17 Aug 2015	17 Aug 2015	17 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.17 U	0.042 U	0.042 U	0.17 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.085 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.9 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**4.1 M**	0.5 U	0.75 U	**3.6 M**	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	1.5 U
VOC	Benzene	µg/g	0.02	0.21	14		0.0068 U	0.0068 U	**0.03**	**0.0086**	0.0068 U	**0.01**	**0.01**	**0.05**	0.027 U	0.0068 U	0.0068 U	0.027 U	0.0068 U	0.0068 U	0.0068 U	**0.02**	0.0068 U	0.014 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.12 U	0.03 U	0.03 U	0.12 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.04 U	0.018 U	0.018 U	**0.02**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.072 U	0.018 U	**0.01**	0.072 U	0.018 U	0.018 U	0.018 U	**0.02**	0.018 U	0.036 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.28**	0.05 U	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.1 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.32 U	0.08 U	**0.11**	0.32 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.12 U	0.03 U	0.03 U	0.12 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U	0.01 U	0.01 U	0.04 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.08 U	0.02 U	0.02 U	0.08 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.11 U	0.02 U	0.02 U	**0.08**	0.02 U	0.02 U	**0.02**	**0.03**	**0.02**	0.08 U	0.02 U	**0.02**	0.08 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.04 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.09 U	0.03 U	0.03 U	**0.1**	0.03 U	0.03 U	**0.05**	**0.05**	**0.05**	0.12 U	0.03 U	**0.07**	0.12 U	0.03 U	0.03 U	0.03 U	**0.06**	0.03 U	0.06 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.14 U	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	**0.08**	**0.08**	**0.07**	0.14 U	0.05 U	**0.09**	0.14 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	0.072 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984).

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH106-15	BH106-15	BH106-15	BH107-15	BH107-15	BH107-15	BH107-15	BH108-15	BH108-15	BH108-15	BH108-15	BH109-15	BH109-15	BH109-15	BH110-15	BH110-15	BH110-15	BH110-15	BH111-15
					Sample ID	S-11102463-082115-TB-451	S-11102463-082115-TB-452	S-11102463-082115-TB-453	S-11102463-082415-TB-461	S-11102463-082415-TB-462	S-11102463-082415-TB-463	S-11102463-082415-TB-464	S-11102463-081915-TB-434	S-11102463-081915-TB-435	S-11102463-081915-TB-436	S-11102463-081915-TB-437	S-11102463-082015-TB-441	S-11102463-082015-TB-442	S-11102463-082015-TB-443	S-11102463-082015-TB-444	S-11102463-082015-TB-445	S-11102463-082015-TB-446	S-11102463-082015-TB-447	S-11102463-112415-KMV-201
					Start Depth	0.76	3.05	6.86	2.29	3.81	3.81	6.86	3.04	3.81	3.81	2.28	3.04	2.28	6.09	2.28	3.81	3.81	6.85	0
					End Depth	1.37	3.66	7.47	2.9	4.42	4.42	7.47	3.65	4.41	4.41	2.89	3.65	2.89	6.7	2.89	4.41	4.41	7.46	0.6
					Date	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	24 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**9.2**	**23**	**21.7**	**12.9**	**24.6**	**47.6**	**14.7**	**13**	**53.6**	**17.2**	**16.8**	**19**	**21.8**	**63.9**	**16.1**	**34**	**27.3**	**19.9**	**12.1**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.5**	**7.28**	**7.18**	**7.9**	**6.95**	**7.02**	**7.51**	**7.79**	**7.31**	**7.73**	**8.1**	**7.76**	**7.41**	**6.84**	**8.13**	**7.84**	**7.54**	**7.66**	**7.54**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					**12.1**
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	**1.2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.9**
INORGANIC	Arsenic	µg/g	18	18		**3.7**	**2.8**	1 U	**1.3**	**2**	**6.4**	1 U	**3.8**	**3.1**	**1.1**	**1.2**	**1.5**	**1.9**	1 U	**1.4**	**1.4**	**1.4**	1 U	**9.9**
INORGANIC	Barium	µg/g	220	390		**29.1**	**53**	**8.1**	**10.9**	**30.5**	**85.4**	**19.2**	**27.2**	**12.3**	**6.8**	**18**	**14.2**	**21.4**	**7.1**	**9.3**	**15.9**	**24.2**	**6.2**	**94**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**6.4**	**7.8**	5 U	5 U	5 U	**6.8**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**8.1**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**1.75**	**1.12**	**0.19**	**0.14**	**0.68**	**0.77**	**0.66**	**0.18**	**1.66**	**0.31**	0.1 U	**0.76**	**0.99**	**0.23**	**0.52**	**0.73**	**1.18**	**0.11**	**0.42**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	**3.36**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.63**
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**10.5**	**16.3**	**3**	**4.9**	**8.5**	**20.5**	**6.9**	**37.3**	**6.4**	**5.7**	**8.5**	**6.6**	**5.4**	**2.8**	**6**	**5.2**	**6.6**	**2.7**	**25.8**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**4**	**5.5**	1 U	**1.5**	**2.8**	**5.7**	**2.5**	**11.4**	**2.2**	**1.8**	**2.4**	**2.2**	**2.4**	**1.1**	**16**	**2.8**	**2.9**	**1.4**	**7.7**
INORGANIC	Copper	µg/g	92	140		**11**	**12.7**	**1.2**	**3.5**	**7.1**	**44**	**8.4**	**51**	**4.1**	**2.4**	**4.2**	**4.9**	**11.9**	**1.2**	**3.4**	**5.1**	**5.3**	**1.6**	**56.6**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.7**	**0.34**	**0.15**	**0.21**	**0.46**	**0.72**	**0.12**	**0.15**	**0.21**	**0.14**	**0.17**	**0.5**	**2.19**	**0.27**	**0.59**	**0.37**	**0.47**	**0.12**	**1.32**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**45.1**	**13.8**	**2.1**	**200**	**7.2**	**116**	**13.7**	**27**	**4.5**	**3.2**	**10.6**	**8.6**	**481**	**2.3**	**7.9**	**5**	**3.7**	**2**	**162**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.03**	**0.06**	0.005 U	**0.02**	**0.02**	**0.96**	**0.0067**	**0.02**	**0.01**	**0.0077**	**0.01**	**0.03**	**0.18**	0.005 U	**0.05**	**0.01**	**0.01**	0.005 U	**0.118**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.6**
INORGANIC	Nickel	µg/g	82	100		**9.9**	**12**	**2.3**	**3.3**	**6.7**	**15.7**	**7.4**	**27.2**	**3.9**	**2.7**	**4.4**	**4.4**	**22.1**	**2.4**	**48.2**	**6**	**6.2**	**2.8**	**22**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.64**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.21**
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.33**	**2.35**	**0.91**	**1.03**	**0.94**	**1.15**		**0.62**	**0.41**	**0.3**	**0.81**	**0.38**	**0.11**	**0.36**	**0.32**	**0.49**	**0.95**	**0.49**	
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**16.2**	**22.4**	**4.8**	**10.1**	**12.5**	**23.3**	**8.7**	**18.5**	**14.7**	**16.7**	**23.2**	**13.9**	**32.1**	**4.6**	**17**	**8.9**	**10.9**	**4.7**	**28**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	**0.14**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**163**	**42.7**	**5.5**	**1800**	**42.9**	**131**	**75**	**45.9**	**14.3**	**10.4**	**16.3**	**13.5**	**26.6**	**6.5**	**73.3**	**16.1**	**14.5**	**7.9**	**241**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH106-15	BH106-15	BH106-15	BH107-15	BH107-15	BH107-15	BH107-15	BH108-15	BH108-15	BH108-15	BH108-15	BH109-15	BH109-15	BH109-15	BH110-15	BH110-15	BH110-15	BH110-15	BH111-15
					Sample ID	S-11102463-082115-TB-451	S-11102463-082115-TB-452	S-11102463-082115-TB-453	S-11102463-082415-TB-461	S-11102463-082415-TB-462	S-11102463-082415-TB-463	S-11102463-082415-TB-464	S-11102463-081915-TB-434	S-11102463-081915-TB-435	S-11102463-081915-TB-436	S-11102463-081915-TB-437	S-11102463-082015-TB-441	S-11102463-082015-TB-442	S-11102463-082015-TB-443	S-11102463-082015-TB-444	S-11102463-082015-TB-445	S-11102463-082015-TB-446	S-11102463-082015-TB-447	S-11102463-112415-KMV-201
					Start Depth	0.76	3.05	6.86	2.29	3.81	3.81	6.86	3.04	3.81	3.81	2.28	3.04	2.28	6.09	2.28	3.81	3.81	6.85	0
					End Depth	1.37	3.66	7.47	2.9	4.42	4.42	7.47	3.65	4.41	4.41	2.89	3.65	2.89	6.7	2.89	4.41	4.41	7.46	0.6
					Date	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	24 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.29**	**0.09**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**8.68**	0.064 U	0.042 U	**0.09**	0.042 U	**20.4**	0.085 U	**0.19**	0.042 U	0.042 U	0.042 U	**2.19**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.12**	**0.04**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**4.28 D**	0.045 U	0.03 U	**0.05**	0.03 U	**15 D**	0.06 U	**0.09**	0.03 U	0.03 U	0.03 U	**0.963**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.16**	**0.05**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**4.4 D**	0.045 U	0.03 U	**0.04**	0.03 U	**5.35 D**	0.06 U	**0.1**	0.03 U	0.03 U	0.03 U	**1.23**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.23**	**0.13**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**5.16 D**	0.075 U	0.05 U	**0.05**	0.05 U	**5.69 D**	0.1 U	**0.17**	0.05 U	0.05 U	0.05 U	**0.135**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.97 D**	0.075 U	0.05 U	0.05 U	0.05 U	**0.61 D**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.151**
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.32**	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2.17 D**	0.075 U	0.05 U	0.05 U	0.05 U	**3.24 D**	0.1 U	**0.15**	0.05 U	0.05 U	0.05 U	**0.444**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.49**	**0.32**	0.05 U	**0.15**	**0.05**	**0.11**	0.05 U	**2.41 D**	**0.09 D**	**0.06**	**0.06**	0.05 U	**6.12 D**	0.1 U	**0.17**	0.05 U	**0.06**	0.05 U	**2.28**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.61**	**0.24**	0.05 U	**0.14**	**0.05**	**0.11**	0.05 U	**1.98 D**	0.075 U	0.05 U	0.05 U	0.05 U	**7.74 D**	0.1 U	**0.13**	0.05 U	0.05 U	0.05 U	**3.04**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.66**	**0.24**	0.05 U	**0.16**	0.05 U	**0.11**	0.05 U	**1.57 D**	0.075 U	0.05 U	0.05 U	0.05 U	**2.7 D**	0.1 U	**0.19**	0.05 U	**0.05**	0.05 U	**3.71**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**2.56**	**0.13**	0.05 U	**0.07**	0.05 U	**0.07**	0.05 U	**1.01 D**	0.075 U	0.05 U	0.05 U	0.05 U	**6.5 D**	0.1 U	**0.08**	0.05 U	0.05 U	0.05 U	**2.3**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.24**	**0.06**	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.05 U	0.05 U	0.05 U	0.5 U	0.1 U	**0.05**	0.05 U	0.05 U	0.05 U	**1.14**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.65**	**0.32**	0.05 U	**0.16**	**0.06**	**0.13**	0.05 U	**3.85 D**	**0.12 D**	**0.08**	**0.1**	0.05 U	**12.9 D**	0.1 U	**0.19**	0.05 U	**0.07**	0.05 U	**2.3**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.15**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.05 U	0.05 U	0.05 U	**1.58 D**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.466**
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**1.26**	**0.6**	0.05 U	**0.36**	**0.12**	**0.24**	0.05 U	**3.34 D**	**0.14 D**	**0.1**	**0.12**	0.05 U	**2.74 D**	0.1 U	**0.54**	**0.05**	**0.14**	0.05 U	**4.07**
PAH	Fluorene	µg/g	0.19	62	62	**0.3**	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2.58 D**	0.075 U	0.05 U	0.05 U	0.05 U	**3.99 D**	0.1 U	**0.19**	0.05 U	0.05 U	0.05 U	**0.119**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.48**	**0.12**	0.05 U	**0.08**	0.05 U	**0.06**	0.05 U	**0.81 D**	0.075 U	0.05 U	0.05 U	0.05 U	**2.03 D**	0.1 U	**0.08**	0.05 U	0.05 U	0.05 U	**2.33**
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.75**	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**11.4 D**	0.075 U	0.05 U	0.05 U	0.05 U	**1.7 D**	0.1 U	**0.08**	0.05 U	0.05 U	0.05 U	**0.967**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**1.33**	**0.24**	0.05 U	**0.26**	**0.08**	**0.1**	0.05 U	**9.43 D**	**0.12 D**	**0.06**	**0.16**	0.05 U	**15.7 D**	0.1 U	**0.72**	0.05 U	**0.18**	0.05 U	**2**
PAH	Pyrene	µg/g	1	78	2600	**1.18**	**0.78**	0.05 U	**0.31**	**0.16**	**0.26**	0.05 U	**5.36 D**	**0.21 D**	**0.16**	**0.2**	**0.06**	**36 D**	0.1 U	**0.44**	**0.07**	**0.19**	0.05 U	**3.78**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**20 D**	7.5 U	5 U	5 U	5 U	**165 D**	10 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**14**	7.5 U	5 U	5 U	5 U	**157**	10 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	50 U	10 U	10 U	**14**	10 U	10 U	10 U	**215 D**	15 U	**10**	**31**	10 U	**6900 D**	20 U	10 U	10 U	10 U	10 U	50 U
PHC	F2-Naphth	µg/g	10	98	230	50 U	10 U	10 U	**14**	10 U	10 U	10 U	**204**	15 U	**10**	**31**	10 U	**6900**	20 U	10 U	10 U	10 U	10 U	50 U
PHC	F3 (C16-C34)	µg/g	240	300		**2730 A**	50 U	50 U	**143**	50 U	**63**	50 U	**8820 D**	**106 D**	**83**	**207**	**87**	**45200 D**	100 U	**75**	**106**	**55**	50 U	**600 D**
PHC	F3-PAH	µg/g	240	300		**2720**	50 U	50 U	**141**	50 U	**62**	50 U	**8800**	**106**	**83**	**206**	**87**	**45200**	100 U	**72**	**106**	**54**	50 U	**580**
PHC	F4 (C34-C50)	µg/g	120	2800		**2380 A**	50 U	50 U	**55**	50 U	50 U	50 U	**10100 D**	75 U	50 U	**91**	**52**	**27100 D**	100 U	50 U	50 U	50 U	50 U	**1270 D**
PHC	F4G-SG	µg/g	120	2800		**9640**							**11700**					**44000**						**4480**
PHC	**Chrom. to baseline at nC5No**	None				**No**	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	No U
PHC	Total Hydrocarbons (C6-C50)	µg/g				**5110**	72 U	72 U	**212**	72 U	72 U	72 U	**19200**	110 U	**93**	**329**	**140**	**79400**	140 U	**75**	**106**	72 U	72 U	**1870**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.13 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	1.4 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.21 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH106-15	BH106-15	BH106-15	BH107-15	BH107-15	BH107-15	BH107-15	BH108-15	BH108-15	BH108-15	BH108-15	BH109-15	BH109-15	BH109-15	BH110-15	BH110-15	BH110-15	BH110-15	BH111-15
					Sample ID	S-11102463-082115-TB-451	S-11102463-082115-TB-452	S-11102463-082115-TB-453	S-11102463-082415-TB-461	S-11102463-082415-TB-462	S-11102463-082415-TB-463	S-11102463-082415-TB-464	S-11102463-081915-TB-434	S-11102463-081915-TB-435	S-11102463-081915-TB-436	S-11102463-081915-TB-437	S-11102463-082015-TB-441	S-11102463-082015-TB-442	S-11102463-082015-TB-443	S-11102463-082015-TB-444	S-11102463-082015-TB-445	S-11102463-082015-TB-446	S-11102463-082015-TB-447	S-11102463-112415-KMV-201
					Start Depth	0.76	3.05	6.86	2.29	3.81	3.81	6.86	3.04	3.81	3.81	2.28	3.04	2.28	6.09	2.28	3.81	3.81	6.85	0
					End Depth	1.37	3.66	7.47	2.9	4.42	4.42	7.47	3.65	4.41	4.41	2.89	3.65	2.89	6.7	2.89	4.41	4.41	7.46	0.6
					Date	21 Aug 2015	21 Aug 2015	21 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	24 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.085 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.05**	0.0068 U	0.0068 U	0.0068 U	**0.0087**	0.0068 U	0.0068 U	**0.91**	**0.01 D**	0.0068 U	0.0068 U	0.0068 U	**0.23**	0.014 U	**0.0075**	0.0068 U	0.0068 U	0.0068 U	**0.0319**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.09 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.05**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**1.99**	0.027 U	0.018 U	0.018 U	0.018 U	**0.77**	0.036 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.052**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.38**	0.075 U	0.05 U	0.05 U	0.05 U	**0.62**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.052**
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.28**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**0.14**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.68**	0.12 U	0.08 U	0.08 U	0.08 U	**0.44**	0.16 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.365**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.03**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.045**
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.06**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.66**	0.03 U	0.02 U	0.02 U	0.02 U	**2.68**	0.04 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.215**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.12**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.9**	0.045 U	0.03 U	0.03 U	0.03 U	**3.39**	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.25**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.19**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.57**	0.054 U	0.05 U	0.05 U	0.05 U	**6.07**	0.072 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.464**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH111-15	BH111-15	BH111-15	BH112-15	BH112-15	BH112-15	BH113-15	BH113-15	BH113-15	BH113-15	BH114-15	BH114-15	BH114-15	BH115-15	BH115-15	BH115-15	BH116-15
					Sample ID	S-11102463-112415-KMV-202	S-11102463-112415-KMV-203	S-11102463-112415-KMV-204	S-11102463-112315-KMV-198	S-11102463-112315-KMV-199	S-11102463-112315-KMV-200	S-11102463-112015-KMV-194	S-11102463-112015-KMV-195	S-11102463-112015-KMV-196	S-11102463-112015-KMV-197	S-11102463-082615-DB-627	S-11102463-082615-DB-628	S-11102463-082615-DB-629	S-11102463-073115-DB-216	S-11102463-073115-DB-217	S-11102463-073115-DB-218	S-11102463-082515-DB-621
					Start Depth	3.04	6.09	6.09	0.76	3.04	5.33	0.76	2.28	2.28	7.62	0.76	3.05	4.57	0.76	3.04	6.09	0.76
					End Depth	3.65	6.7	6.7	1.37	3.65	5.94	1.37	2.89	2.89	8.22	1.37	3.66	5.18	1.37	3.65	6.7	1.37
					Date	24 Nov 2015	24 Nov 2015	24 Nov 2015	23 Nov 2015	23 Nov 2015	23 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	31 Jul 2015	31 Jul 2015	31 Jul 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**16.8**	**32.2**	**34.5**	**6.54**	**24.7**	**31.8**	**16.5**	**31.5**	**33.5**	**29.2**	**12.1**	**39**	**46.1**	**17.6**	**57.5**	**51.3**	**30.3**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.52**	**7.06**	**7.1**	**8.09**	**7.32**	**7.17**	**7.42**	**7.14**	**7.1**	**7.23**	**7.76**	**7.12**	**7.07**	**7.54**	**6.98**	**6.95**	**7.2**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**16.8**	**32.2**	**34.5**	**6.54**	**24.7**	**31.8**	**16.5**	**31.5**	**33.5**	**29.2**							
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	**23.4**	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.1**	**2.4**	**2.1**	1 U	**2.2**	1 U	**4.8**	**1.8**	**1.5**	**1.1**	**1.7**	**9**	**1.7**	**1.6**	**17.8**	**1.9**	**1.9**
INORGANIC	Barium	µg/g	220	390		**18.2**	**85.5**	**80.1**	**10.7**	**50.7**	**44**	**303**	**42.2**	**37.8**	**50.6**	**27.8**	**133**	**109**	**30.1**	**80.6**	**127**	**41.9**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.58**	0.5 U	**0.53**	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	**6.2**	**5.9**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**13.1**	**10.2**	**6.3**	**12**	**10.3**	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.24**	**0.31**	**0.37**	**0.15**	**0.62**	**0.41**	**0.67**	**1.03**	**1.31**	**0.37**	**0.38**	**2.95**	**0.31**	**0.75**	**1.94**	**0.83**	**1.51**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.59**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**6.6**	**24.9**	**19.4**	**4.3**	**15.3**	**9.4**	**10.5**	**10.3**	**7.8**	**10**	**7.4**	**37.1**	**26.7**	**12.3**	**21.6**	**16.6**	**9.3**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.22**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.9**	**6.7**	**7.1**	**1.9**	**3.1**	**3.1**	**2.8**	**2.9**	**2.4**	**3.3**	**2.5**	**6.4**	**7.7**	**5.5**	**6.2**	**5.3**	**3.1**
INORGANIC	Copper	µg/g	92	140		**4.7**	**15.6**	**14.4**	**12.6**	**14.3**	**5.7**	**81.6**	**9.9**	**7.7**	**5.9**	**10**	**36.9**	**17.4**	**8.3**	**18.1**	**14.8**	**13**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.269**	**0.351**	**0.363**	**5.75**	**0.661**	**0.366**	**1.09**	**0.46**	**0.5**	**0.231**	**0.2**	**0.48**	**0.26**	**0.21**	**0.34**	**0.19**	**0.36**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**13.3**	**8**	**6.4**	**9.5**	**22.6**	**3.5**	**784**	**17.1**	**13.1**	**3.1**	**25.9**	**64.5**	**7.8**	**11.2**	**10.5**	**10.5**	**20.1**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0507**	**0.02**	**0.0163**	**0.0265**	**0.186**	**0.0074**	**0.246**	**0.0692**	**0.0696**	**0.0061**	**0.07**	**0.56**	**0.02**	**0.02**	**0.05**	**0.02**	**0.12**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.4**	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**3.5**	**17**	**14.7**	**4.2**	**6.4**	**6**	**7.3**	**5.9**	**5.1**	**7**	**4.9**	**14.3**	**18.2**	**9.9**	**16.3**	**12.6**	**11.6**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.34**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**0.31**	**0.21**	**49.3**	**1.71**	**0.58**	**6.81**	**1.26**	**1.43**	0.1 U	**0.43**	**1.1**	**0.27**	**0.28**	**0.53**	**0.4**	**0.24**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1**	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**12.6**	**28.6**	**27.9**	**9.1**	**16**	**16**	**13.3**	**13.7**	**9.9**	**16.1**	**12.4**	**28.6**	**35.6**	**20.1**	**29.3**	**22.2**	**14.9**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	**0.21**	**0.16**	0.05 U
INORGANIC	Zinc	µg/g	290	340		**15.6**	**36.5**	**35.5**	**25.7**	**38.6**	**15.4**	**345**	**32.1**	**29.8**	**18**	**47.6**	**102**	**44.9**	**27.9**	**39.8**	**33.3**	**51.1**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH111-15	BH111-15	BH111-15	BH112-15	BH112-15	BH112-15	BH113-15	BH113-15	BH113-15	BH113-15	BH114-15	BH114-15	BH114-15	BH115-15	BH115-15	BH115-15	BH116-15
						Sample ID	S-11102463-112415-KMV-202	S-11102463-112415-KMV-203	S-11102463-112415-KMV-204	S-11102463-112315-KMV-198	S-11102463-112315-KMV-199	S-11102463-112315-KMV-200	S-11102463-112015-KMV-194	S-11102463-112015-KMV-195	S-11102463-112015-KMV-196	S-11102463-112015-KMV-197	S-11102463-082615-DB-627	S-11102463-082615-DB-628	S-11102463-082615-DB-629	S-11102463-073115-DB-216	S-11102463-073115-DB-217	S-11102463-073115-DB-218	S-11102463-082515-DB-621
						Start Depth	3.04	6.09	6.09	0.76	3.04	5.33	0.76	2.28	2.28	7.62	0.76	3.05	4.57	0.76	3.04	6.09	0.76
						End Depth	3.65	6.7	6.7	1.37	3.65	5.94	1.37	2.89	2.89	8.22	1.37	3.66	5.18	1.37	3.65	6.7	1.37
						Date	24 Nov 2015	24 Nov 2015	24 Nov 2015	23 Nov 2015	23 Nov 2015	23 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	31 Jul 2015	31 Jul 2015	31 Jul 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.09**	**0.045**	**0.059**	0.042 U	**0.07**	**0.6**	0.042 U	**7.7**	0.064 U	**0.4**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.034**	0.03 U	0.03 U	0.03 U		0.03 U	**0.044**	0.03 U	0.03 U	0.03 U	**0.03**	**0.32**	0.03 U	**3.31**	0.045 U	**0.25 D**	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	0.03 U	0.03 U	**0.035**	0.03 U	**0.047**	**0.045**	**0.059**	0.03 U	**0.04**	**0.28**	0.03 U	**4.4**	0.045 U	**0.15 D**	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.105**	0.05 U	0.05 U	0.05 U	**0.182**	0.05 U	0.05 U	**0.554**	**0.589**	0.05 U	**0.05**	**0.89**	0.05 U	0.15 U	0.075 U	0.075 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.052**	0.05 U	0.05 U	0.05 U	**0.247**	0.05 U	0.05 U	**0.1**	**0.111**	0.05 U	0.05 U	**0.8**	0.05 U	0.15 U	0.075 U	0.075 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.183**	0.05 U	0.05 U	0.05 U	**0.441**	0.05 U	0.05 U	**0.564**	**0.548**	0.05 U	**0.09**	**2.84**	0.05 U	**0.12**	0.075 U	0.075 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.463**	0.05 U	0.05 U	**0.095**	**0.989**	0.05 U	0.05 U	**0.782**	**0.786**	0.05 U	**0.28**	**4.73**	0.05 U	0.3 U	0.075 U	0.075 U	**0.16**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.421**	0.05 U	0.05 U	**0.089**	**0.853**	0.05 U	0.05 U	**0.632**	**0.543**	0.05 U	**0.24**	**3.43**	0.05 U	**0.46**	0.075 U	0.075 U	**0.16**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.458**	0.05 U	0.05 U	**0.107**	**0.802**	0.05 U	0.05 U	**0.703**	**0.608**	0.05 U	**0.35**	**3.52**	0.05 U	**0.35**	0.075 U	0.075 U	**0.19**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.224**	0.05 U	0.05 U	0.05 U	**0.452**	0.05 U	**0.078**	**0.352**	**0.277**	0.05 U	**0.15**	**1.81**	0.05 U	**0.43**	0.075 U	0.075 U	**0.11**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.171**	0.05 U	0.05 U	**0.052**		0.05 U	0.05 U	**0.199**	**0.236**	0.05 U	**0.1**	**0.77**	0.05 U	**0.13**	0.075 U	0.075 U	**0.05**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.469**	0.05 U	0.05 U	**0.096**	**1.08**	0.05 U	**0.08**	**0.786**	**0.799**	0.05 U	**0.3**	**5.03**	0.05 U	**0.26**	0.075 U	0.075 U	**0.16**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	**0.098**	0.05 U	0.05 U	**0.083**	**0.072**	0.05 U	0.05 U	**0.4**	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.83**	0.05 U	0.05 U	**0.191**	**1.79**	0.05 U	0.05 U	**1.81**	**1.67**	0.05 U	**0.62**	**8.46**	0.05 U	**0.52**			**0.28**
PAH	Fluorene	µg/g	0.19	62	62	**0.101**	0.05 U	0.05 U	0.05 U	**0.241**	0.05 U	0.05 U	**0.358**	**0.408**	0.05 U	**0.05**	**1.14**	0.05 U	**0.11**	0.075 U	0.075 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.224**	0.05 U	0.05 U	**0.051**	**0.385**	0.05 U	0.05 U	**0.376**	**0.294**	0.05 U	**0.16**	**1.72**	0.05 U	**0.32**	0.075 U	0.075 U	**0.11**
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.151**	**0.185**	0.05 U	0.05 U	**0.28**	0.05 U	**4.48**	0.075 U	**0.24 D**	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.711**	0.05 U	0.05 U	**0.146**	**1.47**	0.05 U	0.05 U	**2.18**	**2.21**	0.05 U	**0.5**	**8.6**	0.05 U	**0.35**	**0.1 D**	0.075 U	**0.09**
PAH	Pyrene	µg/g	1	78	2600	**0.929**	0.05 U	0.05 U	**0.16**	**2.22**	0.05 U	0.05 U	**1.97**	**1.97**	0.05 U	**0.51**	**10.3**	0.05 U	**0.67**	**0.13 D**		**0.26**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	**5.1**	5 U	5 U	5 U	5 U	5 U	5 U	**511 D**	**9 D**	7.5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**489**	**7.9**	7.5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**12**	10 U	10 U	10 U	**42**	10 U	**22**	**44**	**47**	10 U	**11**	**115**	10 U	**289**	15 U	**31 D**	10 U
PHC	F2-Naphth	µg/g	10	98	230	**12**	10 U	10 U	10 U	**42**	10 U	**22**	**44**	**47**	10 U	**11**	**115**	10 U	**284**	15 U	**31**	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**134**	50 U	50 U	50 U	**421**	50 U	**3850**	**294**	**318**	50 U	**71**	**941**	50 U	**58**	**143 D**	**113 D**	**169**
PHC	F3-PAH	µg/g	240	300		**130**	50 U	50 U	50 U	**412**	50 U	**3850**	**285**	**310**	50 U	**68**	**900**	50 U	**55**	**143**	**113**	**168**
PHC	F4 (C34-C50)	µg/g	120	2800		**57**	50 U	**54**	50 U	**96**	50 U	**2580**	**75**	**80**	50 U	**63**	**199**	50 U	50 U	75 U	**79 D**	**77**
PHC	F4G-SG	µg/g	120	2800																		
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**204**	72 U	72 U	72 U	**559**	72 U	**6460**	**413**	**445**	72 U	**146**	**1260**	72 U	**858**	**150**	**220**	**246**
SVOC	Hexachlorocyclopentadiene	µg/g																				
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.055 U	0.05 U	0.05 U	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH111-15	BH111-15	BH111-15	BH112-15	BH112-15	BH112-15	BH113-15	BH113-15	BH113-15	BH113-15	BH114-15	BH114-15	BH114-15	BH115-15	BH115-15	BH115-15	BH116-15
					Sample ID	S-11102463-112415-KMV-202	S-11102463-112415-KMV-203	S-11102463-112415-KMV-204	S-11102463-112315-KMV-198	S-11102463-112315-KMV-199	S-11102463-112315-KMV-200	S-11102463-112015-KMV-194	S-11102463-112015-KMV-195	S-11102463-112015-KMV-196	S-11102463-112015-KMV-197	S-11102463-082615-DB-627	S-11102463-082615-DB-628	S-11102463-082615-DB-629	S-11102463-073115-DB-216	S-11102463-073115-DB-217	S-11102463-073115-DB-218	S-11102463-082515-DB-621
					Start Depth	3.04	6.09	6.09	0.76	3.04	5.33	0.76	2.28	2.28	7.62	0.76	3.05	4.57	0.76	3.04	6.09	0.76
					End Depth	3.65	6.7	6.7	1.37	3.65	5.94	1.37	2.89	2.89	8.22	1.37	3.66	5.18	1.37	3.65	6.7	1.37
					Date	24 Nov 2015	24 Nov 2015	24 Nov 2015	23 Nov 2015	23 Nov 2015	23 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	20 Nov 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	31 Jul 2015	31 Jul 2015	31 Jul 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.3 U	0.064 U	0.064 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	**0.91 D**	0.75 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.75 U	0.75 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.8**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	**1.83 D**	**1.21 D**	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	0.0068 U	**0.0137**	0.0068 U	0.0068 U	**0.0364**	**0.008**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**1.41 D**	**0.36 D**	**0.14 D**	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	0.075 U	0.075 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4.5 U	0.075 U	0.075 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	0.045 U	0.045 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.043**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**4.76**	**0.11 D**	**0.07 D**	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**17.6 D**	**0.25 D**	**0.14 D**	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.075 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**0.095**	0.08 U	0.08 U	0.08 U	**0.191**	0.08 U	**0.189**	0.08 U	0.08 U	0.08 U	0.08 U	**0.2**	0.08 U	**0.29**	**0.3 D**	0.12 U	**0.14**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.045 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.015 U	0.015 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2 U	0.03 U	0.03 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	**0.032**	0.02 U	0.02 U	**0.142**	**0.025**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**1.99**	**0.07 D**	**0.04 D**	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	**0.048**	0.03 U	0.03 U	**0.177**	**0.038**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**12.9**	**0.24 D**	**0.17 D**	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U	**0.319**	**0.064**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**14.9**	**0.32**	**0.22**	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH116-15	BH116-15	BH117-15	BH117-15	BH117-15	BH118-15	BH118-15	BH118-15	BH118-15	BH119-15	BH119-15	BH119-15	BH119-15	BH120-15	BH120-15	BH120-15	BH121-15	BH121-15	BH121-15
					Sample ID	S-11102463-082515-DB-622	S-11102463-082515-DB-623	S-11102463-082615-DB-630	S-11102463-082615-DB-631	S-11102463-082615-DB-632	S-11102463-082715-RK-326	S-11102463-082715-RK-327	S-11102463-082715-RK-328	S-11102463-082715-RK-329	S-11102463-082515-DB-617	S-11102463-082515-DB-618	S-11102463-082515-DB-619	S-11102463-082515-DB-620	S-11102463-082615-RK-323	S-11102463-082615-RK-324	S-11102463-082615-RK-325	S-11102463-082515-DB-614	S-11102463-082515-DB-615	S-11102463-082515-DB-616
					Start Depth	3.05	5.33	3.81	6.1	8.38	3.81	3.81	6.1	9.14	3.05	4.57	6.86	6.86	3.81	6.86	9.14	3.05	5.33	6.86
					End Depth	3.66	5.94	4.42	6.71	8.99	4.42	4.42	6.71	9.75	3.66	5.18	7.47	7.47	4.42	7.47	9.75	3.66	5.94	7.47
					Date	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**26.1**	**39.3**	**20**	**69.7**	**17.7**	**22.9**	**40.7**	**52.6**	**17.2**	**14.1**	**45.1**	**27.2**	**48.3**	**17.9**	**31.1**	**58.4**	**13.8**	**33.9**	**46.9**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**6.93**	**7**	**7.46**	**6.64**	**7.46**	**7.41**	**7.18**	**7.16**	**7.85**	**11.23**	**7.04**	**7.16**	**7.18**	**7.67**	**7.09**	**6.83**	**7.52**	**7.16**	**6.95**
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**2.9**	**1.3**	**1.6**	**1.8**	**1.1**	**2.5**	**2.3**	**2.3**	**1.1**	**1**	**3.2**	1 U	**1.2**	**1.7**	**1**	**3**	**2.3**	**1.6**	**1.8**
INORGANIC	Barium	µg/g	220	390		**69.2**	**85.5**	**21.5**	**107**	**18.1**	**87.2**	**49.1**	**124**	**14.3**	**17.5**	**72**	**53.5**	**82.5**	**26.9**	**45.6**	**141**	**32.4**	**57.8**	**116**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	**0.61**	0.5 U	**0.51**	0.5 U	**0.68**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.57**
INORGANIC	Boron	µg/g	36	120		**5.7**	**5**	5 U	**14.2**	5 U	**10.7**	**5.8**	**8.5**	5 U	5 U	**7.5**	5 U	**6.2**	**5.7**	5 U	**9.4**	5 U	5 U	**7.4**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.88**	**0.38**	**0.36**	**3.66**	**0.1**	**2.26**	**1.91**	**0.52**	0.1 U	**0.52**	**0.78**	**0.6**	**0.51**	**0.72**	**0.4**	**1.08**	**0.49**	**0.74**	**0.35**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**18.4**	**13.9**	**6.3**	**25.8**	**6.2**	**22.6**	**12**	**26.1**	**5.3**	**5.6**	**21.6**	**8.3**	**15**	**10.2**	**10.1**	**19.4**	**8.6**	**11**	**25.1**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U
INORGANIC	Cobalt	µg/g	22	22		**5.1**	**4.9**	**1.9**	**7**	**2.4**	**7.2**	**3.8**	**8.6**	**2.5**	**1.8**	**7.2**	**3**	**4.9**	**4.4**	**3.4**	**7.9**	**2.7**	**4.2**	**7.7**
INORGANIC	Copper	µg/g	92	140		**16.7**	**10**	**4.5**	**17.4**	**5**	**19**	**10.5**	**21.6**	**3.8**	**5.9**	**19.4**	**5.4**	**11.3**	**6.8**	**6**	**15.5**	**14.6**	**8.1**	**18.3**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.49**	**0.31**	**0.17**	**0.16**	**0.11**	**0.74**	**0.68**	**0.68 M**	**0.11**	**0.27**	**0.25**	**0.46**	**0.5**	**0.56**	**0.3**	**0.27 M**	**0.68**	**0.36**	**0.53**
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**18.6**	**4.5**	**8**	**7.8**	**3.4**	**8.8**	**12.7**	**9.2**	**3.4**	**10.3**	**17.3**	**2.4**	**4.7**	**8.1**	**3**	**6.2**	**29.4**	**5.3**	**7.1**
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.15**	**0.01**	**0.03**	**0.02**	**0.005**	**0.03**	**0.08**	**0.03**	**0.0088**	**0.05**	**0.11**	**0.0089**	**0.01**	**0.03**	**0.0073**	**0.01**	**0.11**	**0.02**	**0.02**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**10.7**	**10.1**	**3.5**	**18.5**	**5.4**	**16.9**	**8.2**	**21.3**	**5.7**	**4.1**	**15.9**	**5.9**	**11.2**	**8.5**	**7**	**16.2**	**11**	**8.4**	**18.5**
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.07**	**0.21**	**1.01**	**2.16**		**1.39**	**1.08**	**2.18**			**1.97**	**0.35**	**0.39**	**0.28**	**0.72**	**0.71**	**0.13**	**1.27**	**0.47**
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**20.3**	**21**	**10.7**	**33.4**	**10.5**	**28.1**	**15.6**	**36.6**	**7.1**	**10.2**	**27.5**	**13.8**	**21.4**	**17.3**	**17.1**	**28.8**	**15.7**	**15.6**	**32**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.13**	0.05 U	0.05 U	**0.08**
INORGANIC	Zinc	µg/g	290	340		**50.6**	**25**	**14.7**	**43**	**13.8**	**42.7**	**29.4**	**49.8**	**11.8**	**17.1**	**64.1**	**16.1**	**27.3**	**21.1**	**17.4**	**38.9**	**58.8**	**23.4**	**47.6**
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH116-15	BH116-15	BH117-15	BH117-15	BH117-15	BH118-15	BH118-15	BH118-15	BH118-15	BH119-15	BH119-15	BH119-15	BH119-15	BH120-15	BH120-15	BH120-15	BH121-15	BH121-15	BH121-15
					Sample ID	S-11102463-082515-DB-622	S-11102463-082515-DB-623	S-11102463-082615-DB-630	S-11102463-082615-DB-631	S-11102463-082615-DB-632	S-11102463-082715-RK-326	S-11102463-082715-RK-327	S-11102463-082715-RK-328	S-11102463-082715-RK-329	S-11102463-082515-DB-617	S-11102463-082515-DB-618	S-11102463-082515-DB-619	S-11102463-082515-DB-620	S-11102463-082615-RK-323	S-11102463-082615-RK-324	S-11102463-082615-RK-325	S-11102463-082515-DB-614	S-11102463-082515-DB-615	S-11102463-082515-DB-616
					Start Depth	3.05	5.33	3.81	6.1	8.38	3.81	3.81	6.1	9.14	3.05	4.57	6.86	6.86	3.81	6.86	9.14	3.05	5.33	6.86
					End Depth	3.66	5.94	4.42	6.71	8.99	4.42	4.42	6.71	9.75	3.66	5.18	7.47	7.47	4.42	7.47	9.75	3.66	5.94	7.47
					Date	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.13**	0.042 U	0.042 U	0.085 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	**3.86**	**0.08**	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	**2.12**	**0.73**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.06**	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	**0.56**	**0.03**	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	**1.17**	**0.44**	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.07**	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	**0.03**	0.045 U	0.03 U	**3.29**	**0.04**	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	**0.95**	**0.28**	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.44**	0.05 U	**0.1**	0.1 U	0.05 U	**0.76**	**0.64**	0.075 U	0.05 U	**3.45**	**0.35**	0.05 U	0.05 U	**0.06**	0.05 U	0.075 U	**4.67**	**0.92**	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.11**	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	**0.25**	0.075 U	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	**1.87**	**0.28**	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.45**	0.05 U	**0.21**	0.1 U	0.05 U	0.05 U	**0.4**	0.075 U	0.05 U	**194 A**	**0.45**	0.05 U	0.05 U	**0.16**	0.05 U	0.075 U	**13.5 A**	**0.9**	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.65**	0.05 U	**0.35**	0.1 U	0.05 U	0.05 U	**1.24**	0.075 U	0.05 U	**1.12**	**1.14**	0.05 U	0.05 U	**0.3**	0.05 U	0.075 U	**18.8 A**	**1.33**	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.48**	0.05 U	**0.3**	0.1 U	0.05 U	0.05 U	**0.99**	0.075 U	0.05 U	**0.33**	**0.8**	0.05 U	0.05 U	**0.2**	0.05 U	0.075 U	**15.1 A**	**1.21**	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.51**	0.05 U	**0.33**	0.1 U	0.05 U	0.05 U	**1**	0.075 U	0.05 U	**0.51**	**0.83**	0.05 U	0.05 U	**0.17**	0.05 U	0.075 U	**17.6 A**	**1.19**	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.26**	0.05 U	**0.16**	0.1 U	0.05 U	0.05 U	**0.56**	0.075 U	0.05 U	**0.14**	**0.39**	0.05 U	0.05 U	**0.1**	0.05 U	0.075 U	**7.48**	**0.68**	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.13**	0.05 U	**0.09**	0.1 U	0.05 U	0.05 U	**0.28**	0.075 U	0.05 U	**0.14**	**0.26**	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	**5.57**	**0.36**	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.74**	0.05 U	**0.36**	0.1 U	0.05 U	0.05 U	**1.41**	0.075 U	0.05 U	**2.47**	**1.25**	0.05 U	0.05 U	**0.31**	0.05 U	0.075 U	**15.8 A**	**1.5**	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.05**	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	**0.13**	0.075 U	0.05 U	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	**2.17**	**0.17**	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**1.44**	0.05 U	**0.86**	0.1 U	0.05 U	0.05 U	**2.08**	0.075 U	0.05 U	**5.96**	**2**	0.05 U	0.05 U	**0.58**	0.05 U	0.075 U	**45.4 A**	**2.59**	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	**0.33**	0.05 U	**0.08**	0.1 U	0.05 U	0.05 U	**0.18**	0.075 U	0.05 U	**19.4 A**	**0.24**	0.05 U	0.05 U	**0.05**	0.05 U	0.075 U	**7.02**	**0.65**	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.27**	0.05 U	**0.17**	0.1 U	0.05 U	0.05 U	**0.54**	0.075 U	0.05 U	**0.15**	**0.39**	0.05 U	0.05 U	**0.08**	0.05 U	0.075 U	**8.64**	**0.65**	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.14**	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	**0.06**	0.075 U	0.05 U	**4.55**	**0.11**	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	**0.93**	**0.45**	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**1.76**	0.05 U	**0.52**	0.1 U	0.05 U	0.05 U	**0.33**	0.075 U	0.05 U	**37.1 A**	**1.23**	0.05 U	0.05 U	**0.55**	0.05 U	0.075 U	**46.8 A**	**3.02**	0.05 U
PAH	Pyrene	µg/g	1	78	2600	**1.83**	0.05 U	**0.83**	0.1 U	0.05 U	**0.06**	**2.79**	0.075 U	0.05 U	**3.85**	**2.7**	0.05 U	0.05 U	**0.9**	0.05 U	0.075 U	**36.7 A**	**3.55**	0.05 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	15 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	15 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**221**	10 U	10 U	20 U	10 U	10 U	**29**	15 U	10 U	**25**	**29**	10 U	10 U	10 U	10 U	15 U	10 U	**95**	10 U
PHC	F2-Naphth	µg/g	10	98	230	**221**	10 U	10 U	20 U	10 U	10 U	**29**		10 U	**21**	**29**	10 U	10 U	10 U	10 U	15 U	10 U	**94**	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**2150**	50 U	**68**	**130 M**	50 U	50 U	**294**	75 U	50 U	**195**	**397**	50 U	**74**	50 U	50 U	**83 M**	**198**	**700**	**66**
PHC	F3-PAH	µg/g	240	300		**2150**	50 U	**64**	**130**	50 U	50 U	**285**		50 U	**146**	**387**	50 U	**74**	50 U	50 U	**83**	50 U	**686**	**66**
PHC	F4 (C34-C50)	µg/g	120	2800		**291**	50 U	50 U	**110 M**	50 U	50 U	**60**	75 U	50 U	**51**	**100**	50 U	**59**	50 U	50 U	75 U	**157**	**103**	**54**
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**2670**	72 U	72 U	**240**	72 U	72 U	**383**		72 U	**271**	**526**	72 U	**132**	72 U	72 U	110 U	**355**	**898**	**120**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH116-15	BH116-15	BH117-15	BH117-15	BH117-15	BH118-15	BH118-15	BH118-15	BH118-15	BH119-15	BH119-15	BH119-15	BH119-15	BH120-15	BH120-15	BH120-15	BH121-15	BH121-15	BH121-15
					Sample ID	S-11102463-082515-DB-622	S-11102463-082515-DB-623	S-11102463-082615-DB-630	S-11102463-082615-DB-631	S-11102463-082615-DB-632	S-11102463-082715-RK-326	S-11102463-082715-RK-327	S-11102463-082715-RK-328	S-11102463-082715-RK-329	S-11102463-082515-DB-617	S-11102463-082515-DB-618	S-11102463-082515-DB-619	S-11102463-082515-DB-620	S-11102463-082615-RK-323	S-11102463-082615-RK-324	S-11102463-082615-RK-325	S-11102463-082515-DB-614	S-11102463-082515-DB-615	S-11102463-082515-DB-616
					Start Depth	3.05	5.33	3.81	6.1	8.38	3.81	3.81	6.1	9.14	3.05	4.57	6.86	6.86	3.81	6.86	9.14	3.05	5.33	6.86
					End Depth	3.66	5.94	4.42	6.71	8.99	4.42	4.42	6.71	9.75	3.66	5.18	7.47	7.47	4.42	7.47	9.75	3.66	5.94	7.47
					Date	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.13 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U		0.75 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	**0.01**	0.0002 U	0.0068 U	0.0068 U	0.0068 U	0.0001 U	0.0068 U	0.0068 U	0.0001 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0001 U	**0.01**	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.054 U	0.018 U	0.018 U	0.018 U	0.027 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.027 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.24 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.03 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.06 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.06 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	**0.04**	0.09 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.11 U	0.05 U	0.05 U	0.05 U	0.054 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH123-15	BH123-15	BH123-15	BH124-15	BH124-15	BH124-15	BH125-15	BH125-15	BH125-15	BH126-15	BH126-15	BH126-15	BH127-15	BH127-15	BH127-15	BH128-15	BH128-15	BH128-15	BH129-15
					Sample ID	S-11102463-082615-DB-624	S-11102463-082615-DB-625	S-11102463-082615-DB-626	S-11102463-080415-LG-207	S-11102463-080415-LG-208	S-11102463-080415-LG-209	S-11102463-082415-DB-611	S-11102463-082415-DB-612	S-11102463-082415-DB-613	S-11102463-072915-DB-204	S-11102463-072915-DB-205	S-11102463-072915-DB-206	S-11102463-080415-LG-204	S-11102463-080415-LG-205	S-11102463-080415-LG-206	S-11102463-073015-DB-207	S-11102463-073015-DB-208	S-11102463-073015-DB-209	S-11102463-073115-DB-213
					Start Depth	3.05	5.33	8.38	0.76	2.28	6.09	3.81	6.1	8.38	2.28	6.85	0.76	0.03	2.28	6.09	0.76	3.04	5.33	0.03
					End Depth	3.66	5.94	8.99	1.37	2.89	6.7	4.42	6.71	8.99	2.89	7.46	1.37	0.6	2.89	6.7	1.37	3.65	5.94	0.6
					Date	26 Aug 2015	26 Aug 2015	26 Aug 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	29 Jul 2015	29 Jul 2015	29 Jul 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	31 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**31.7**	**32.4**	**30.9**	**26.2**	**44.8**	**48.5**	**16.8**	**41.9**	**53.3**	**40.2**	**17.9**	**10.1**	**5.79**	**31.6**	**47**	**14.1**	**39.1**	**37.1**	**7.74**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.77**	**7.04**	**7.07**	**7.39**	**7.08**	**7.33**	**7.68**	**6.86**	**6.82**	**7.01**	**7.62**	**7.32**	**7.34**	**6.99**	**7.05**	**7.58**	**7.16**	**7.07**	**7.33**
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1**	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**2.3**	**1.4**	**1.6**	**1.8**	**3.9**	**1.6**	**1.7**	**11.2**	**1.5**	**3.3**	1 U	**3.9**	**5**	**1.3**	**1.5**	**2.9**	**5**	**1.4**	**5.1**
INORGANIC	Barium	µg/g	220	390		**59.3**	**80.7**	**85.7**	**43.9**	**106**	**121**	**23.3**	**129**	**128**	**105**	**12.3**	**64.8**	**64.6**	**28.2**	**134**	**72.9**	**140**	**105**	**90.6**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	**0.52**	0.5 U	0.5 U	**0.64**	0.5 U	**0.5**	0.5 U	0.5 U	**0.64**	0.5 U	0.5 U	0.5 U	**0.63**	0.5 U	**0.55**
INORGANIC	Boron	µg/g	36	120		**7.5**	**7**	**7.9**	**6.1**	**9.7**	**6.7**	5 U	**9.6**	**5.9**	**10.2**	5 U	**8.5**	**13.2**	5 U	**9.1**	**8.8**	**12.4**	**7.9**	**12.3**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**1.21**	**0.18**	**0.41**	**1.4**	**0.59**	**0.5**	**0.39**	**0.38**	**0.39**	**0.96**	0.1 U	**0.34**	**0.52**	**1.27**	**0.55**	**0.46**	**0.63**	**0.43**	**0.39**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**14.7**	**17.4**	**21.1**	**9.8**	**22.5**	**14.3**	**9.5**	**32.2**	**15.4**	**28.3**	**5.4**	**23.5**	**20.7**	**7.6**	**16**	**18.8**	**38.3**	**21.3**	**27.4**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**5**	**5.2**	**6.8**	**3.5**	**7.1**	**4.6**	**3.6**	**8.7**	**5.5**	**8.5**	**2.1**	**7.1**	**8.9**	**3.7**	**5.5**	**6.5**	**10.9**	**6.5**	**9.6**
INORGANIC	Copper	µg/g	92	140		**14.9**	**9.8**	**14.2**	**6.9**	**16.4**	**10.8**	**7.1**	**26.9**	**13.2**	**24.8**	**3.1**	**20.8**	**29.2**	**5.9**	**12.6**	**16.7**	**30.9**	**16.1**	**29.9**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.71**	**0.46**	**0.32**	**0.3**	**0.22**	**0.2**	**0.38**	**0.51**	**0.44**	**0.56**	**0.15**	**0.25**	**0.23**	**0.18**	**0.24**	**0.42**	**0.49**	**0.22**	**0.21**
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**23.8**	**5**	**6.2**	**17.1**	**9.4**	**4.2**	**7**	**22.5**	**4.8**	**17.1**	**2.4**	**40**	**211**	**5.4**	**5.2**	**35.9**	**19.9**	**6.4**	**86.9**
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.08**	**0.01**	**0.01**	**0.08**	**0.04**	**0.01**	**0.04**	**0.13**	**0.01**	**0.12**	**0.005**	**0.06**	**0.09**	**0.02**	**0.01**	**0.07**	**0.15**	**0.03**	**0.55**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**12**	**11.4**	**15.2**	**7.2**	**16.4**	**10.3**	**7.3**	**21.7**	**12.7**	**20.4**	**4.1**	**16.1**	**20.3**	**7.1**	**12.2**	**14.7**	**26.9**	**15.4**	**20.6**
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.55**	**2.92**	**0.26**	**0.4**	**1.08**	**0.23**	**0.19**	**0.6**	**0.33**	**1.54**	**0.48**	**0.59**	**0.2**	**0.63**	**0.27**	**1.17**	**1.08**	**0.33**	**0.21**
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**22**	**25.5**	**31.3**	**16.4**	**29**	**20.3**	**16**	**34.9**	**20.8**	**33.2**	**9.4**	**25.8**	**30.1**	**12.3**	**22.3**	**27.8**	**44.5**	**29.2**	**34.2**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.07**	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**51.1**	**28.2**	**37.2**	**25.2**	**42**	**25.1**	**20.6**	**77.9**	**30.3**	**66.9**	**12.8**	**62.2**	**86.8**	**17.6**	**29**	**65.2**	**85**	**39.8**	**96.5**
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH123-15	BH123-15	BH123-15	BH124-15	BH124-15	BH124-15	BH125-15	BH125-15	BH125-15	BH126-15	BH126-15	BH126-15	BH127-15	BH127-15	BH127-15	BH128-15	BH128-15	BH128-15	BH129-15
					Sample ID	S-11102463-082615-DB-624	S-11102463-082615-DB-625	S-11102463-082615-DB-626	S-11102463-080415-LG-207	S-11102463-080415-LG-208	S-11102463-080415-LG-209	S-11102463-082415-DB-611	S-11102463-082415-DB-612	S-11102463-082415-DB-613	S-11102463-072915-DB-204	S-11102463-072915-DB-205	S-11102463-072915-DB-206	S-11102463-080415-LG-204	S-11102463-080415-LG-205	S-11102463-080415-LG-206	S-11102463-073015-DB-207	S-11102463-073015-DB-208	S-11102463-073015-DB-209	S-11102463-073115-DB-213
					Start Depth	3.05	5.33	8.38	0.76	2.28	6.09	3.81	6.1	8.38	2.28	6.85	0.76	0.03	2.28	6.09	0.76	3.04	5.33	0.03
					End Depth	3.66	5.94	8.99	1.37	2.89	6.7	4.42	6.71	8.99	2.89	7.46	1.37	0.6	2.89	6.7	1.37	3.65	5.94	0.6
					Date	26 Aug 2015	26 Aug 2015	26 Aug 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	29 Jul 2015	29 Jul 2015	29 Jul 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	31 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.18**	0.042 U	0.042 U	**123**	**15.3**	**0.13**	0.042 U	0.042 U	0.064 U	**0.13**	**0.18**	**2.39**	**25.5**	**2.26**	0.042 U	**0.11**	**0.05**	0.042 U	**0.24**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.08**	0.03 U	0.03 U	**56.3 D**	**7.27**	**0.06**	0.03 U	0.03 U	0.045 U	**0.13**	**0.18**	**2.15**	**12.4 D**	**1.01**	0.03 U	**0.07**	**0.05**	0.03 U	**0.1**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.09**	0.03 U	0.03 U	**66.4 D**	**8.04**	**0.07**	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	**0.24**	**13.2 D**	**1.26**	0.03 U	**0.03**	0.03 U	0.03 U	**0.13**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.41**	0.05 U	0.05 U	6 U	1.5 U	0.05 U	**0.33**	**0.06**	0.075 U	**0.37**	0.05 U	0.4 U	**1.01 D**	**0.78**	0.05 U	0.05 U	**0.43**	0.05 U	**0.11**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.07**	0.05 U	0.05 U	1.5 U	0.3 U	0.05 U	**0.08**	0.05 U	0.075 U	**0.14**	0.05 U	0.08 U	0.5 U	**0.52**	0.05 U	0.05 U	**0.07**	0.05 U	**0.05**
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.63**	0.05 U	0.05 U	0.5 U	0.2 U	0.05 U	**0.61**	**0.07**	0.075 U	**0.29**	0.05 U	0.25 U	0.5 U	**1.76**	0.05 U	0.05 U	**0.22**	0.05 U	**0.29**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**1.28**	0.05 U	0.05 U	0.5 U	**0.29**	0.05 U	**0.41**	**0.2**	0.075 U	**0.62**	0.05 U	**0.25**	**0.74 D**	**3.21**	0.05 U	**0.13**	**0.36**	0.05 U	**0.66**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**1.02**	0.05 U	0.05 U	0.5 U	**0.26**	0.05 U	**0.54**	**0.14**	0.075 U	**0.46**	0.05 U	**0.22**	**0.95 D**	**4.98**	0.05 U	**0.12**	**0.3**	0.05 U	**0.53**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**1.28**	0.05 U	0.05 U	0.5 U	**0.22**	0.05 U	**0.38**	**0.14**	0.075 U	**0.47**	0.05 U	**0.21**	**1.03 D**	**3.18**	0.05 U	**0.14**	**0.3**	0.05 U	**0.71**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.64**	0.05 U	0.05 U	0.5 U	**0.14**	0.05 U	**0.44**	**0.07**	0.075 U	**0.2**	0.05 U	**0.18**	**0.64 D**	**3.17**	0.05 U	**0.07**	**0.15**	0.05 U	**0.26**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.38**	0.05 U	0.05 U	0.5 U	**0.09**	0.05 U	**0.16**	0.05 U	0.075 U	**0.14**	0.05 U	**0.05**	0.5 U	**1**	0.05 U	0.05 U	**0.09**	0.05 U	**0.22**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**1.25**	0.05 U	0.05 U	**0.63 D**	**0.35**	0.05 U	**0.46**	**0.24**	0.075 U	**0.7**	0.05 U	**0.34**	**0.83 D**	**2.98**	0.05 U	**0.16**	**0.4**	0.05 U	**0.61**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.13**	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	**0.06**	0.05 U	0.05 U	0.5 U	**0.32**	0.05 U	0.05 U	0.05 U	0.05 U	**0.07**
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**2.78**	0.05 U	0.05 U	**1.12 D**	**0.62**	0.05 U	**1.41**	**0.45**	0.075 U	**1.07**	0.05 U	**0.37**	**1.61 D**	**7.78**	0.05 U	**0.24**	**0.68**	0.05 U	**1.54**
PAH	Fluorene	µg/g	0.19	62	62	**0.45**	0.05 U	0.05 U	**8.68 D**	**1.51**	0.05 U	**0.14**	**0.08**	0.075 U	**0.22**	0.05 U	**0.46**	**1.66 D**	**0.36**	0.05 U	0.05 U	**0.2**	0.05 U	**0.16**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.71**	0.05 U	0.05 U	0.5 U	**0.13**	0.05 U	**0.34**	**0.07**	0.075 U	**0.19**	0.05 U	**0.11**	**0.7 D**	**2.75**	0.05 U	**0.06**	**0.13**	0.05 U	**0.29**
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.16**	0.05 U	0.05 U	**3.92 D**		0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U		**10.8 D**	**0.98**	0.05 U	0.05 U	0.05 U	0.05 U	**0.24**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**2.61**	0.05 U	0.05 U	**17.4 D**	**3.32**	0.05 U	**1.45**	**0.35**	0.075 U	**0.96**	**0.12**	**1.45**	**2.6 D**	**3.17**	0.05 U	**0.14**	**0.79**	0.05 U	**1.24**
PAH	Pyrene	µg/g	1	78	2600	**2.68**	0.05 U	0.05 U	**1.4 D**	**0.81**	0.05 U	**1.76**	**0.57**	0.075 U	**1.47**	**0.07**	**0.91**	**2.08 D**	**9.91**	0.05 U	**0.43**	**0.89**	0.05 U	**1.25**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	**488 D**	**6.9**	5 U	5 U	5 U	7.5 U	5 U	5 U	**7.9**	**1270 D**	**18.6**	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	**469**	**6.5**	5 U	5 U	5 U	7.5 U	5 U	5 U	**7.7**	**1230**	**17.7**	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	**13**	10 U	**5070**	**48**	**14**	10 U	**11**	15 U	**23**	**28**	**427**	**5520**	**47**	**21**	**15**	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	10 U	**13**	10 U	**5070**	**48**	**14**	10 U	**11**	15 U	**23**	**28**	**427**	**5510**	**46**	**21**	**15**	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**71**	**55**	50 U	**4210**	**94**	**61**	50 U	**207**	75 U	**173**	**64**	**1060**	**2630**	**59**	**60**	**140**	**60**	50 U	**59**
PHC	F3-PAH	µg/g	240	300		**58**	**55**	50 U	**4190**	**88**	**61**	50 U	**205**	75 U	**167**	**63**	**1060**	**2620**	50 U	**60**	**139**	**56**	50 U	**53**
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	**55**	50 U	**171**	50 U	50 U	50 U	**106**	75 U	50 U	50 U	**310**	**225**	50 U	50 U	**74**	50 U	50 U	**79**
PHC	F4G-SG	µg/g	120	2800									**940**				**950**							
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	**No**	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	**123**	72 U	**9940**	**149**	**75**	72 U	**324**	110 U	**195**	**92**	**1810**	**9650**	**124**	**81**	**229**	72 U	72 U	**138**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	10 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	1.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	3 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH123-15	BH123-15	BH123-15	BH124-15	BH124-15	BH124-15	BH125-15	BH125-15	BH125-15	BH126-15	BH126-15	BH126-15	BH127-15	BH127-15	BH127-15	BH128-15	BH128-15	BH128-15	BH129-15
					Sample ID	S-11102463-082615-DB-624	S-11102463-082615-DB-625	S-11102463-082615-DB-626	S-11102463-080415-LG-207	S-11102463-080415-LG-208	S-11102463-080415-LG-209	S-11102463-082415-DB-611	S-11102463-082415-DB-612	S-11102463-082415-DB-613	S-11102463-072915-DB-204	S-11102463-072915-DB-205	S-11102463-072915-DB-206	S-11102463-080415-LG-204	S-11102463-080415-LG-205	S-11102463-080415-LG-206	S-11102463-073015-DB-207	S-11102463-073015-DB-208	S-11102463-073015-DB-209	S-11102463-073115-DB-213
					Start Depth	3.05	5.33	8.38	0.76	2.28	6.09	3.81	6.1	8.38	2.28	6.85	0.76	0.03	2.28	6.09	0.76	3.04	5.33	0.03
					End Depth	3.66	5.94	8.99	1.37	2.89	6.7	4.42	6.71	8.99	2.89	7.46	1.37	0.6	2.89	6.7	1.37	3.65	5.94	0.6
					Date	26 Aug 2015	26 Aug 2015	26 Aug 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	29 Jul 2015	29 Jul 2015	29 Jul 2015	04 Aug 2015	04 Aug 2015	04 Aug 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	31 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.12 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U	0.48 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	2 U	0.5 U	1 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	2 U	0.5 U	**1.36**	0.5 U	0.5 U	**0.98 M**	0.5 U	0.5 U	0.5 U	8 U	0.5 U	0.65 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	0.0068 U	**0.67 D**	**0.2**	0.0068 U	0.0068 U	0.0068 U	0.0001 U	0.0068 U	0.0068 U	**0.01**	**2.22 D**	**0.4**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	5 U	0.06 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	12 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	7 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.12 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.48 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.3 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	**17.5**	**0.08**	0.036 U	0.018 U	0.018 U	0.027 U	0.018 U	0.018 U	**0.01**	**16.3 D**	**0.22**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	**3.66 D**		0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	**13.3 D**	**0.82**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	**0.22**	0.08 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U	0.08 U	0.08 U	**7.06**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.09**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.04 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.16 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.08 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.32 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	**0.57**	**0.02**	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	**0.05**	**7.87**	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	**0.62**	**0.1**	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	**0.05**	**11.9**	**0.2**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	**1.2**	**0.13**	0.05 U	0.05 U	0.05 U	0.054 U	0.05 U	0.05 U	**0.11**	**19.8**	**0.24**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH129-15	BH129-15	BH130-15	BH130-15	BH130-15	BH42-15	BH42-15	BH42-15	BH43-15	BH43-15	BH43-15	BH43-15	BH44-15	BH44-15	BH45-15	BH45-15	BH45-15	BH46-15	BH46-15
					Sample ID	S-11102463-073115-DB-214	S-11102463-073115-DB-215	S-11102463-073015-DB-210	S-11102463-073015-DB-211	S-11102463-073015-DB-212	S-11102463-080715-LG-219	S-11102463-080715-LG-220	S-11102463-080715-LG-221	S-11102463-081215-LG-239	S-11102463-081215-LG-240	S-11102463-081215-LG-241	S-11102463-081215-LG-242	S-11102463-081015-LG-231	S-11102463-081015-LG-232	S-11102463-080715-LG-222	S-11102463-080715-LG-223	S-11102463-080715-LG-224	S-11102463-081015-LG-228	S-11102463-081015-LG-229
					Start Depth	2.28	6.85	0.76	3.04	6.09	0.76	1.52	5.33	1.52	3.04	3.04	6.09	0.76	3.04	0.76	2.28	6.09	0.76	2.28
					End Depth	2.89	7.46	1.37	3.65	6.7	1.37	2.13	5.94	2.13	3.65	3.65	6.7	1.37	3.65	1.37	2.89	6.7	1.37	2.89
					Date	31 Jul 2015	31 Jul 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	10 Aug 2015	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	10 Aug 2015	10 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**39.4**	**33.6**	**6.94**	**42.6**	**35.4**	**5.73**	**10.2**	**18.5**	**22.4**	**14.5**	**14.2**	**16**	**13.6**	**18**	**14.9**	**20.9**	**18.7**	**9.79**	**17**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.08**	**7.07**	**7.63**	**7.04**	**7.03**	**7.61**	**7.34**	**7.75**	**7.71**	**7.9**	**7.82**	**7.96**	**7.98**	**7.9**	**8.21**	**7.94**	**8**	**8.12**	**8.07**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.9**	**1.1**	**7.6**	**4.6**	1 U	**17.9**	**22.6**	**1**	**1.4**	**1**	**1.3**	**1.4**	1 U	1 U	**1.2**	**1.1**	1 U	**1**	**1**
INORGANIC	Barium	µg/g	220	390		**48.2**	**65.3**	**73.7**	**39.9**	**56.7**	**27.3**	**22.9**	**8.4**	**11.7**	**7.1**	**11.6**	**8.3**	**7.7**	**7.6**	**8.7**	**7.3**	**6.9**	**7**	**10.5**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	**1.26**	0.5 U	0.5 U	0.5 U	**0.51**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**7.4**	**6.4**	**25.1**	**6.4**	**5.4**	**7.1**	**7.5**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.71**	**0.52**	**1.11**	**0.91**	**0.37**	**0.4**	**0.55**	0.1 U	**0.6**	0.1 U	**0.24**	0.1 U	0.1 U	**0.15**	**0.25**	0.1 U	0.1 U	0.1 U	0.1 U
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**17.6**	**12.7**	**40.4**	**22.1**	**10.1**	**8.1**	**10.6**	**4.8**	**6.7**	**4.8**	**6.9**	**6.7**	**6.9**	**4.9**	**5.9**	**5.3**	**4.2**	**4.7**	**10**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.25**	**0.53**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**6.2**	**4.1**	**22.5**	**4.9**	**3**	**5.9**	**5.7**	**3.2**	**2.5**	**1.6**	**2.3**	**2**	**2**	**1.9**	**3.3**	**1.9**	**2.4**	**2.5**	**2.1**
INORGANIC	Copper	µg/g	92	140		**12.1**	**8**	**28.5**	**9.8**	**6.6**	**17.4**	**23.8**	**2.9**	**3.2**	**1.7**	**3.7**	**2.3**	**1.6**	**1.9**	**2.6**	**1.8**	**1.8**	**1.8**	**1.9**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.29**	**0.25**	**0.14**	**0.27**	**0.26**	**2.31**	**2.32**	**0.4**	**0.42**	**0.24**	**0.32**	**0.25**	**0.46**	**0.38**	**0.55**	**0.32**	**0.45**	**0.25**	**0.52**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**8.8**	**3.4**	**8.1**	**7.2**	**2.6**	**14.7**	**12.8**	**2.7**	**3.4**	**2.2**	**4.8**	**3.1**	**2.3**	**2.1**	**4.2**	**6**	**2.4**	**2.1**	**2.5**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.04**	**0.0089**	**0.02**	**0.03**	**0.01**	**0.03**	**0.02**	**0.0075**	**0.0092**	0.005 U	**0.03**	**0.0061**	0.005 U	0.005 U	**0.0056**	0.005 U	0.005 U	0.005 U	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**13.1**	**8.7**	**46.5**	**10.4**	**6.3**	**15.3**	**14**	**6**	**4.5**	**2.7**	**4.3**	**3.6**	**3.3**	**3.3**	**6**	**3.5**	**3.5**	**5.4**	**4.4**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	**1.2**	**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.92**	**0.35**	**0.15**	**0.51**	**0.7**	**0.22**	**0.17**	**0.2**	**1.02**	**0.51**	**0.79**	**0.54**	**4.28**	**3.04**	**1.78**	**0.56**	**0.96**	**0.61**	**0.85**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**25.1**	**19.5**	**53.5**	**30.6**	**14.8**	**14.1**	**15.3**	**10.4**	**11.3**	**10.7**	**13.2**	**14.2**	**20.7**	**12.5**	**16.1**	**8.7**	**9.6**	**12.1**	**19.5**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**35.5**	**22.9**	**92.1**	**25.2**	**16.4**	**35.7**	**36.5**	**13.5**	**14.7**	**8.4**	**14.1**	**12**	**8.8**	**8.8**	**14.1**	**9.4**	**11.1**	**9.9**	**9.9**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH129-15	BH129-15	BH130-15	BH130-15	BH130-15	BH42-15	BH42-15	BH42-15	BH43-15	BH43-15	BH43-15	BH43-15	BH44-15	BH44-15	BH45-15	BH45-15	BH45-15	BH46-15	BH46-15
					Sample ID	S-11102463-073115-DB-214	S-11102463-073115-DB-215	S-11102463-073015-DB-210	S-11102463-073015-DB-211	S-11102463-073015-DB-212	S-11102463-080715-LG-219	S-11102463-080715-LG-220	S-11102463-080715-LG-221	S-11102463-081215-LG-239	S-11102463-081215-LG-240	S-11102463-081215-LG-241	S-11102463-081215-LG-242	S-11102463-081015-LG-231	S-11102463-081015-LG-232	S-11102463-080715-LG-222	S-11102463-080715-LG-223	S-11102463-080715-LG-224	S-11102463-081015-LG-228	S-11102463-081015-LG-229
					Start Depth	2.28	6.85	0.76	3.04	6.09	0.76	1.52	5.33	1.52	3.04	3.04	6.09	0.76	3.04	0.76	2.28	6.09	0.76	2.28
					End Depth	2.89	7.46	1.37	3.65	6.7	1.37	2.13	5.94	2.13	3.65	3.65	6.7	1.37	3.65	1.37	2.89	6.7	1.37	2.89
					Date	31 Jul 2015	31 Jul 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	10 Aug 2015	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	10 Aug 2015	10 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.06**	0.042 U	**0.2**	0.042 U	0.042 U	**1.63**	**2.18**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.08**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.06**	0.03 U	**0.09**	0.03 U	0.03 U	**0.73**	**1.01**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	**0.11**	0.03 U	0.03 U	**0.89**	**1.17**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.03**	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.24**	0.05 U	0.05 U	**0.21**	0.05 U	0.05 U	0.07 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	**0.17**	0.05 U	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.14**	0.05 U	0.05 U	**0.27**	0.05 U	0.05 U	**0.05**	0.05 U	**0.1**	0.05 U	**0.27**	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		0.05 U	0.05 U	**0.65**	0.05 U	**0.37**	**0.15**	0.05 U	**0.41**	0.05 U	**0.39**	0.05 U	0.05 U	0.05 U	**0.35**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.22**	0.05 U	0.05 U	**0.45**	0.05 U	**0.47**	**0.14**	0.05 U	**0.41**	0.05 U	**0.35**	0.05 U	0.05 U	0.05 U	**0.36**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.21**	0.05 U	0.05 U	**0.42**	0.05 U	**0.76**	**0.22**	0.05 U	**0.42**	0.05 U	**0.4**	0.05 U	0.05 U	0.05 U	**0.44**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.1**	0.05 U	0.05 U	**0.16**	0.05 U	**0.46**	**0.12**	0.05 U	**0.22**	0.05 U	**0.18**	0.05 U	0.05 U	0.05 U	**0.22**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.06**	0.05 U	0.05 U	**0.13**	0.05 U	**0.2**	**0.05**	0.05 U	**0.11**	0.05 U	**0.11**	0.05 U	0.05 U	0.05 U	**0.13**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.26**	0.05 U	0.05 U	**0.63**	0.05 U	**0.54**	**0.25**	0.05 U	**0.48**	0.05 U	**0.38**	**0.05**	0.05 U	0.05 U	**0.34**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**0.14**	0.05 U	0.05 U	**0.05**	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.5**	0.05 U	0.05 U	**0.88**	0.05 U	**0.5**	**0.22**	0.05 U	**0.57**	**0.08**	**0.96**	**0.09**	0.05 U	0.05 U	**0.7**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	**0.12**	0.05 U	0.05 U	**0.21**	0.05 U		**0.1**	0.05 U	0.05 U	0.05 U	**0.13**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.09**	0.05 U	0.05 U	**0.16**	0.05 U	**0.45**	**0.1**	0.05 U	**0.21**	0.05 U	**0.2**	0.05 U	0.05 U	0.05 U	**0.23**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	**0.09**	0.05 U	0.05 U	**0.56**	**0.58**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.5**	0.05 U	**0.06**	**0.78**	0.05 U	**0.54**	**0.57**	0.05 U	**0.12**	**0.05**	**0.81**	**0.05**	0.05 U	0.05 U	**0.34**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Pyrene	µg/g	1	78	2600	**0.7**	0.05 U	0.05 U	**1.25**	0.05 U	**0.48**	**0.24**	**0.05**	**0.75**	**0.08**	**0.84**	**0.09**	0.05 U	0.05 U	**0.62**	0.05 U	0.05 U	0.05 U	0.05 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	**12.9**	**5.3**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	**9.1**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	10 U	**16**	10 U	**21**	**52**	10 U	10 U	10 U	**10**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U	10 U	**16**	10 U	**21**	**51**	10 U	10 U	10 U	**10**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		50 U	50 U	50 U	**130**	50 U	**144**	**191**	50 U	50 U	50 U	**165**	**89**	50 U	50 U	**174**	50 U	50 U	50 U	50 U
PHC	F3-PAH	µg/g	240	300		50 U	50 U	50 U	**126**	50 U	**141**	**189**	50 U	50 U	50 U	**161**	**89**	50 U	50 U	**171**	50 U	50 U	50 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	50 U	50 U	50 U	**165**	**179**	50 U	50 U	**53**	**153**	**141**	50 U	50 U	**332**	50 U	50 U	50 U	50 U
PHC	F4G-SG	µg/g	120	2800							**560**	**550**								**900**				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	No U	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U	72 U	**146**	72 U	**343**	**427**	72 U	72 U	72 U	**328**	**230**	72 U	72 U	**505**	72 U	72 U	72 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH129-15	BH129-15	BH130-15	BH130-15	BH130-15	BH42-15	BH42-15	BH42-15	BH43-15	BH43-15	BH43-15	BH43-15	BH44-15	BH44-15	BH45-15	BH45-15	BH45-15	BH46-15	BH46-15
					Sample ID	S-11102463-073115-DB-214	S-11102463-073115-DB-215	S-11102463-073015-DB-210	S-11102463-073015-DB-211	S-11102463-073015-DB-212	S-11102463-080715-LG-219	S-11102463-080715-LG-220	S-11102463-080715-LG-221	S-11102463-081215-LG-239	S-11102463-081215-LG-240	S-11102463-081215-LG-241	S-11102463-081215-LG-242	S-11102463-081015-LG-231	S-11102463-081015-LG-232	S-11102463-080715-LG-222	S-11102463-080715-LG-223	S-11102463-080715-LG-224	S-11102463-081015-LG-228	S-11102463-081015-LG-229
					Start Depth	2.28	6.85	0.76	3.04	6.09	0.76	1.52	5.33	1.52	3.04	3.04	6.09	0.76	3.04	0.76	2.28	6.09	0.76	2.28
					End Depth	2.89	7.46	1.37	3.65	6.7	1.37	2.13	5.94	2.13	3.65	3.65	6.7	1.37	3.65	1.37	2.89	6.7	1.37	2.89
					Date	31 Jul 2015	31 Jul 2015	30 Jul 2015	30 Jul 2015	30 Jul 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	10 Aug 2015	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	10 Aug 2015	10 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	**0.77**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.32**	**0.22**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.39**	**0.16**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	**0.05**	0.05 U	**0.06**	**0.2**	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**1.43**	**0.66**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.73**	**0.32**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.86**	**0.39**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.59**	**0.71**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH46-15	BH47-15	BH47-15	BH47-15	BH48-15	BH48-15	BH48-15	BH50-15	BH50-15	BH50-15	BH51-15	BH51-15	BH51-15	BH52-15	BH52-15	BH52-15	BH53-15	BH53-15
					Sample ID	S-11102463-081015-LG-230	S-11102463-080715-LG-225	S-11102463-080715-LG-226	S-11102463-080715-LG-227	S-11102463-082615-KMV-148	S-11102463-082615-KMV-149	S-11102463-082615-KMV-150	S-11102463-111215-TB-524	S-11102463-111215-TB-525	S-11102463-111215-TB-526	S-11102463-081415-TB-407	S-11102463-081415-TB-408	S-11102463-081415-TB-409	S-11102463-082515-KMV-136	S-11102463-082515-KMV-137	S-11102463-082515-KMV-138	S-11102463-081915-TB-431	S-11102463-081915-TB-432
					Start Depth	6.85	0.76	2.28	5.33	3.81	6.86	10.67	0.76	2.28	3.81	0.76	3.04	6.85	5.33	8.38	11.43	2.28	5.33
					End Depth	7.46	1.37	2.89	5.94	4.42	7.47	11.28	1.37	2.89	4.41	1.37	3.65	7.46	5.94	8.99	12.04	2.89	5.94
					Date	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**17.2**	**13.6**	**15.6**	**18**	**14.4**	**42.3**	**23.5**	**12.3**	**19.1**	**11.7**	**9.81**	**20.4**	**11.4**	**47.6**	**37.1**	**13.4**	**19.8**	**17.3**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.9**	**7.56**	**7.68**	**7.91**	**7.7**	**7.18**	**7.63**	**7.79**	**7.86**	**8.05**	**7.99**	**7.31**	**7.71**	**7.5**	**7.17**	**7.64**	**7.68**	**7.84**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%											**12.3**	**19.1**	**11.7**								
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	**6.1**	**1.7**	**1.4**	**2.7**	**3.8**	**1.1**	**1.3**	**1.7**	**1.4**	**1.5**	**1.4**	**1.3**	**1.9**	1 U	**1.2**	**1.1**	1 U
INORGANIC	Barium	µg/g	220	390		**8**	**30.5**	**10.5**	**7.6**	**116**	**96**	**15.1**	**16.4**	**10.8**	**12.7**	**8.9**	**22.8**	**7.9**	**44.5**	**45.8**	**17**	**11.1**	**9.3**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	**0.52**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	**12.6**	**7.6**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**6.1**	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	**0.12**	0.1 U	0.1 U	**0.72**	**0.59**	**0.13**	**0.12**	0.1 U	0.1 U	**0.11**	**0.59**	0.1 U	**2.2**	**0.61**	**0.14**	**0.11**	0.1 U
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**5.3**	**6.3**	**8**	**3.4**	**25.9**	**25.1**	**7**	**6.1**	**5**	**6.2**	**3.9**	**7.9**	**4.4**	**10.3**	**9.4**	**4.8**	**6.8**	**4.9**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.39**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.9**	**15.5**	**7.8**	**2.2**	**8.4**	**7**	**1.8**	**2.7**	**2.2**	**2.4**	**2.5**	**3.3**	**1.9**	**3.6**	**3**	**2.3**	**3.7**	**1.9**
INORGANIC	Copper	µg/g	92	140		**2.3**	**9.8**	**3.1**	**2**	**17.3**	**16.3**	**4.2**	**4.8**	**3**	**3.1**	**3.6**	**5.5**	**3.4**	**7.5**	**6**	**4.4**	**3.4**	**1.5**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.39**	**0.92**	**0.2**	**0.17**	**0.48**	**0.76**	**0.15**	**0.261**	**0.455**	**0.307**	**3.32**	**1.03**	**0.1**	**0.46**	**0.29**	**0.13**	**2.76**	**0.25**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**1.9**	**5.5**	**3**	**2**	**9.4**	**9.2**	**3.3**	**4**	**3.2**	**2.4**	**2.9**	**4**	**2.2**	**4.4**	**2.5**	**2.5**	**3**	**1.6**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	0.005 U	**0.0095**	**0.0065**	0.005 U	**0.01**	**0.03**	0.005 U	**0.008**	0.005 U	0.005 U	0.005 U	**0.01**	0.005 U	**0.01**	**0.0062**	0.005 U	**0.01**	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**3.1**	**22.1**	**13.2**	**3.9**	**18.7**	**16.5**	**4.2**	**5.5**	**3.9**	**4.2**	**8.8**	**6**	**3.7**	**7.9**	**6.1**	**4.7**	**7.3**	**3**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.85**	**0.19**	**0.53**	**0.92**	**0.46**	**0.65**	**0.19**				**1.92**	**6.68**	**0.52**	**3.18**	**0.52**	**0.27**	**3.41**	**2.18**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**11.2**	**10.6**	**24.6**	**6.2**	**35.2**	**28.6**	**6.1**	**11.5**	**10.3**	**14.3**	**7.2**	**13.5**	**7.5**	**14**	**15.7**	**8**	**15.1**	**11.4**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**0.05**	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**8.6**	**45.7**	**14.6**	**9.6**	**44.5**	**39**	**12.4**	**13.7**	**9.1**	**11**	**19.4**	**16.9**	**12.4**	**18.9**	**15.3**	**11.6**	**16.9**	**6.9**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH46-15	BH47-15	BH47-15	BH47-15	BH48-15	BH48-15	BH48-15	BH50-15	BH50-15	BH50-15	BH51-15	BH51-15	BH51-15	BH52-15	BH52-15	BH52-15	BH53-15	BH53-15
						Sample ID	S-11102463-081015-LG-230	S-11102463-080715-LG-225	S-11102463-080715-LG-226	S-11102463-080715-LG-227	S-11102463-082615-KMV-148	S-11102463-082615-KMV-149	S-11102463-082615-KMV-150	S-11102463-111215-TB-524	S-11102463-111215-TB-525	S-11102463-111215-TB-526	S-11102463-081415-TB-407	S-11102463-081415-TB-408	S-11102463-081415-TB-409	S-11102463-082515-KMV-136	S-11102463-082515-KMV-137	S-11102463-082515-KMV-138	S-11102463-081915-TB-431	S-11102463-081915-TB-432
						Start Depth	6.85	0.76	2.28	5.33	3.81	6.86	10.67	0.76	2.28	3.81	0.76	3.04	6.85	5.33	8.38	11.43	2.28	5.33
						End Depth	7.46	1.37	2.89	5.94	4.42	7.47	11.28	1.37	2.89	4.41	1.37	3.65	7.46	5.94	8.99	12.04	2.89	5.94
						Date	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	**0.16**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**12.7**	**43.5**	**0.074**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.15**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	**0.07**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**9.24**	**16.9 D**	**0.074**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.15**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	**0.08**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**3.46**	**26.6 D**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.346**	**0.499**	**0.154**	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	**0.125**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.144**	**0.223**	0.05 U	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	**0.133**	**0.164**	0.05 U	0.05 U	**0.21**	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	**0.097**	**0.095**	0.05 U	0.05 U	**0.16**	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	**0.097**	**0.089**	0.05 U	0.05 U	**0.14**	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**0.057**	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	**0.12**	0.05 U	**0.161**	**0.187**	0.05 U	0.05 U	**0.22**	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	**0.18**	0.05 U	**0.18**	**0.199**	0.05 U	**0.05**	**0.31**	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.451**	**0.648**	**0.103**	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.051**	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**3.49**	**19.1 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	**0.15**	0.05 U	**1.09**	**1.48**	**0.071**	0.05 U	**0.14**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Pyrene	µg/g	1	78	2600	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	**0.26**	0.05 U	**0.384**	**0.472**	0.05 U	0.05 U	**0.43**	0.05 U	**0.16**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1100 D**	**2930 D**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1080**	**2880**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	**19**	10 U	10 U	10 U	10 U	10 U	**2300**	**4520**	10 U	10 U	10 U	10 U	**10**	10 U	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	10 U	**19**	10 U	10 U	10 U	10 U	10 U	**2300**	**4500**	10 U	10 U	10 U	10 U	**10**	10 U	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		50 U	**121**	50 U	50 U	50 U	**77**	50 U	**632**	**1070**	50 U	**110**	**76**	50 U	**71**	50 U	50 U	50 U	50 U
PHC	F3-PAH	µg/g	240	300		50 U	**120**	50 U	50 U	50 U	**76**	50 U	**630**	**1070**	50 U	**110**	**75**	50 U	**71**	50 U	50 U	50 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	**126**	50 U	50 U	50 U	50 U	50 U	**147**	**313**	50 U	**298**	50 U	50 U	50 U	50 U	50 U	50 U	50 U
PHC	F4G-SG	µg/g	120	2800												**680**								
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	**266**	72 U	72 U	72 U	**77**	72 U	**4180**	**8840**	72 U	**408**	**76**	72 U	**81**	72 U	72 U	72 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	3 U	4.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.8 U	13 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.2 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH46-15	BH47-15	BH47-15	BH47-15	BH48-15	BH48-15	BH48-15	BH50-15	BH50-15	BH50-15	BH51-15	BH51-15	BH51-15	BH52-15	BH52-15	BH52-15	BH53-15	BH53-15
					Sample ID	S-11102463-081015-LG-230	S-11102463-080715-LG-225	S-11102463-080715-LG-226	S-11102463-080715-LG-227	S-11102463-082615-KMV-148	S-11102463-082615-KMV-149	S-11102463-082615-KMV-150	S-11102463-111215-TB-524	S-11102463-111215-TB-525	S-11102463-111215-TB-526	S-11102463-081415-TB-407	S-11102463-081415-TB-408	S-11102463-081415-TB-409	S-11102463-082515-KMV-136	S-11102463-082515-KMV-137	S-11102463-082515-KMV-138	S-11102463-081915-TB-431	S-11102463-081915-TB-432
					Start Depth	6.85	0.76	2.28	5.33	3.81	6.86	10.67	0.76	2.28	3.81	0.76	3.04	6.85	5.33	8.38	11.43	2.28	5.33
					End Depth	7.46	1.37	2.89	5.94	4.42	7.47	11.28	1.37	2.89	4.41	1.37	3.65	7.46	5.94	8.99	12.04	2.89	5.94
					Date	10 Aug 2015	07 Aug 2015	07 Aug 2015	07 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.3 U	1.2 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	**0.01**	0.0068 U	**0.01**	0.0068 U	0.0068 U	**0.02**	**0.527 D**	**1.9 D**	**0.0579**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.01**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	12 U	39 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.07 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	5.1 U	16 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.3 U	1.2 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.6 U	2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.12 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	**0.02**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**6.92**	**21.2 D**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**8.35 D**	**22.6 D**	**0.099**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	**0.11**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.4 U	1.2 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.4 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2 U	0.8 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	**0.09**	0.02 U	**0.02**	0.02 U	0.02 U	0.02 U	**1.06**	**3.17**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	**0.13**	0.03 U	**0.03**	0.03 U	0.03 U	0.03 U	**5.8**	**28.1 D**	**0.097**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.08**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	**0.23**	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	**6.86**	**31.3**	**0.097**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH53-15	BH55-15	BH55-15	BH55-15	BH56-15	BH56-15	BH56-15	BH57-15	BH57-15	BH57-15	BH59-15	BH59-15	BH59-15	BH60-15	BH60-15	BH60-15	BH61-15	BH61-15	BH61-15
					Sample ID	S-11102463-081915-TB-433	S-11102463-081315-PH-401	S-11102463-081315-PH-402	S-11102463-081315-PH-403	S-11102463-081215-RK-308	S-11102463-081215-RK-309	S-11102463-081215-RK-310	S-11102463-111915-KMV-191	S-11102463-111915-KMV-192	S-11102463-111915-KMV-193	S-11102463-110315-TB-481	S-11102463-110315-TB-482	S-11102463-110315-TB-483	S-11102463-111115-TB-501	S-11102463-111115-TB-502	S-11102463-111115-TB-503	S-11102463-110215-TB-478	S-11102463-110215-TB-479	S-11102463-110215-TB-480
					Start Depth	6.85	0.76	3.04	6.85	0.76	3.04	5.33	1.52	4.57	6.09	0.76	2.28	6.09	0.76	2.28	6.09	0.76	2.28	5.33
					End Depth	7.46	1.37	3.65	7.46	1.37	3.65	5.94	2.13	5.18	6.7	1.37	2.89	6.4	1.37	2.89	6.7	1.37	2.89	5.94
					Date	19 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	19 Nov 2015	19 Nov 2015	19 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	02 Nov 2015	02 Nov 2015	02 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**18.6**	**24.6**	**15.5**	**31.3**	**23.9**	**22.4**	**18.8**	**18.6**	**19.9**	**24.6**	**19.9**	**17.2**	**15.4**	**8.5**	**17.7**	**20.2**	**11.2**	**19.4**	**14.5**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.6**	**7.41**	**7.85**	**7.14**	**6.97**	**7.82**	**7.68**	**7.59**	**7.59**	**7.43**	**7.3**	**7.52**	**7.37**	**7.84**	**7.82**	**7.51**	**7.56**	**7.51**	**7.85**
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%											**18.6**	**19.9**	**24.6**	**19.9**	**17.2**	**15.4**	**8.5**	**17.7**	**20.2**	**11.2**	**19.4**	**14.5**
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	**2.3**	1 U	1 U	1 U	**1.5**	1 U	**3**	1 U	1 U	**14.3**	**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	**7.4**	1 U	**1.7**	**42.8**	**6.6**	**2**	**9.5**	**3.1**	**2.9**	**16**	**2.2**	1 U	**2.1**	**1.1**	1 U	1 U	1 U	1 U
INORGANIC	Barium	µg/g	220	390		**7**	**102**	**8.5**	**70.7**	**138**	**106**	**20.1**	**157**	**108**	**140**	**464**	**75.8**	**67.8**	**16.6**	**8.4**	**10.2**	**14.2**	**9**	**8.2**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	**0.51**	0.5 U	0.5 U	**1.71**	0.5 U	0.5 U	**0.52**	**0.5**	**0.6**	**0.75**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	**11.9**	5 U	**6.3**	**6.1**	**9.9**	5 U	**9.2**	**7.7**	5 U	**8.6**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	**1.07**	0.1 U	**0.48**	**0.47**	**0.74**	**0.1**	**1.4**	**0.7**	0.1 U	**0.55**	**0.27**	**0.13**	**0.33**	0.1 U	0.1 U	**0.5**	**0.25**	**0.1**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	**2.46**	0.5 U	0.5 U	**0.63**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**4.2**	**24**	**4.5**	**12.9**	**23.8**	**13.2**	**6.5**	**39.8**	**27.4**	**30.5**	**30.3**	**6.1**	**4.5**	**7.9**	**5.4**	**4.8**	**5.3**	**4.3**	**5.2**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.5**	**8.8**	**1.7**	**5**	**90.9**	**4.7**	**2.8**	**8.6**	**8.1**	**10**	**9.2**	**3.1**	**1.6**	**3.3**	**2**	**1.7**	**2.4**	**1.7**	**1.6**
INORGANIC	Copper	µg/g	92	140		**1.5**	**34.6**	**1.8**	**9.4**	**82.2**	**48.6**	**5.6**	**96.3**	**22.8**	**21.4**	**216**	**7.3**	**3.2**	**10.5**	**3.3**	**3.7**	**3**	**1.6**	**1.6**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.11**	**0.65**	**0.65**	**0.49**	**2.52**	**1.55**	**0.78**	**0.528**	**0.404**	**0.381**	**0.422**	**0.215**	**0.219**	**0.215**	**0.083**	**0.214**	**0.166**	**0.127**	**0.135**
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**1.3**	**100**	**2.3**	**3.8**	**99.7**	**57.7**	**10.1**	**150**	**14.1**	**8.5**	**862**	**17.2**	**3.1**	**24.4**	**4.1**	**2.7**	**4.6**	**4.6**	**1.5**
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	0.005 U	**0.18**	**0.01**	**0.01**	**0.02**	**0.03**	**0.0066**	**0.228**	**0.0722**	**0.0236**	**3.84 D**	**0.423**	**0.0053**	**0.06**	**0.0057**	0.005 U	**0.0631**	0.005 U	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	**2.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**2.2**	**20.1**	**3.1**	**10**	**165**	**11.1**	**5**	**25.7**	**18.2**	**21.9**	**23.9**	**6.9**	**3.9**	**7.3**	**3.7**	**4**	**4.3**	**3.3**	**3**
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	**3.2**	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	**0.24**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.31**	0.2 U	0.2 U	**0.68**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.5**	**0.74**	**0.53**	**0.33**	**0.26**	**0.49**	**0.2**	**1.34**	**1.3**	**0.84**	**0.23**	**0.34**	**0.47**	**0.16**		**0.7**	**0.24**		
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	**1.9**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**11**	**33.8**	**10.6**	**19.4**	**15.2**	**17.8**	**12.7**	**33.6**	**38.6**	**45.7**	**31.1**	**9.4**	**5.5**	**17.2**	**13.6**	**7.3**	**10.5**	**9**	**8.1**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**5.5**	**119**	**7.9**	**24.2**	**806**	**201**	**22.7**	**230**	**65**	**55.5**	**203**	**30.3**	**12**	**42.4**	**18.8**	**14**	**10.7**	**7.5**	**9**
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH53-15	BH55-15	BH55-15	BH55-15	BH56-15	BH56-15	BH56-15	BH57-15	BH57-15	BH57-15	BH59-15	BH59-15	BH59-15	BH60-15	BH60-15	BH60-15	BH61-15	BH61-15	BH61-15
					Sample ID	S-11102463-081915-TB-433	S-11102463-081315-PH-401	S-11102463-081315-PH-402	S-11102463-081315-PH-403	S-11102463-081215-RK-308	S-11102463-081215-RK-309	S-11102463-081215-RK-310	S-11102463-111915-KMV-191	S-11102463-111915-KMV-192	S-11102463-111915-KMV-193	S-11102463-110315-TB-481	S-11102463-110315-TB-482	S-11102463-110315-TB-483	S-11102463-111115-TB-501	S-11102463-111115-TB-502	S-11102463-111115-TB-503	S-11102463-110215-TB-478	S-11102463-110215-TB-479	S-11102463-110215-TB-480
					Start Depth	6.85	0.76	3.04	6.85	0.76	3.04	5.33	1.52	4.57	6.09	0.76	2.28	6.09	0.76	2.28	6.09	0.76	2.28	5.33
					End Depth	7.46	1.37	3.65	7.46	1.37	3.65	5.94	2.13	5.18	6.7	1.37	2.89	6.4	1.37	2.89	6.7	1.37	2.89	5.94
					Date	19 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	19 Nov 2015	19 Nov 2015	19 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	02 Nov 2015	02 Nov 2015	02 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	**0.43**	0.042 U	0.042 U	0.042 U	**0.07**	0.042 U	**3.82**	**0.048**	0.042 U	**2.66**	**12.5**	**0.303**	**3.78**	**106**	0.042 U	**17**	**37.6**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.03**	**0.17**	0.03 U	0.03 U	0.03 U	**0.03**	0.03 U	**1.7**	**0.048**	0.03 U		**8.73**	**0.189**	**2.84**	**56 D**	**0.04**	**6.64**	**37.2 D**	**0.037**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	**0.26**	0.03 U	0.03 U	0.03 U	**0.03**	0.03 U	**2.13**	0.03 U	0.03 U	**0.995**	**3.78**	**0.114**	**0.936**	**50.4 D**	0.03 U	**10.3**	**0.426**	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.47**	0.05 U	**3.04**	0.05 U	0.05 U	**26.6 D**	**24.9 D**	**0.483**	**0.211**	**1.8**	0.05 U	**0.404**	**1.2**	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	**0.06**	0.05 U	0.05 U	**0.09**	**0.13**	0.05 U	**1.62**	0.05 U	0.05 U	**1.16**	**1.05**	0.05 U	**0.061**	**0.447**	0.05 U	**0.071**	**0.295**	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	**0.11**	0.05 U	0.05 U	0.05 U	**0.36**	0.05 U	**3.19**	0.05 U	0.05 U	**2.58**	**7.53**	**0.237**	**0.122**	**0.493**	0.05 U	**0.086**	**0.361**	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	**0.37**	0.05 U	0.05 U		**0.75**	**0.06**	**6.79**		0.05 U				**0.17**	**0.181**	0.05 U	**0.117**		0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	**0.4**	0.05 U	0.05 U	**0.24**	**0.59**	0.05 U	**7.54**	**0.089**	0.05 U	**1.48**		**0.092**	**0.171**	**0.099**	0.05 U	**0.081**	**0.076**	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	**0.48**	0.05 U	0.05 U	**0.24**	**0.65**	**0.05**	**8.57**	**0.113**	0.05 U	**1.35**	**2.03**	**0.082**	**0.159**	**0.092**	0.05 U	**0.051**	**0.072**	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	**0.32**	0.05 U	0.05 U	**0.25**	**0.26**	0.05 U	**5.29**	**0.059**	0.05 U	**0.79**	**1.01**	0.05 U	**0.149**	**0.052**	0.05 U	**0.057**	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	**0.16**	0.05 U	0.05 U	**0.06**	**0.21**	0.05 U	**2.59**	0.05 U	0.05 U	**0.584**	**0.785**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	**0.48**	0.05 U	0.05 U	**0.16**	**0.69**	**0.06**	**6.95**	**0.078**	0.05 U	**2.12**	**3.44**	**0.127**	**0.236**	**0.219**	0.05 U	**0.184**	**0.263**	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	**0.07**	0.05 U	0.05 U	**0.07**	**0.08**	0.05 U	**1.1**	0.05 U	0.05 U	**0.223**	**0.234**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	**0.72**	0.05 U	0.05 U	**0.16**	**1.47**	**0.1**	**12**	**0.143**	0.05 U	**4.62**	**8.66**	**0.3**	**0.158**	**0.277**	0.05 U	**0.108**	**0.268**	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	**3.52**	0.05 U	0.05 U	**6.74**	**10.2**	**0.221**	**0.24**	**2.2**	0.05 U	**0.396**	**1.5**	**0.065**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	**0.3**	0.05 U	0.05 U	**0.19**	**0.29**	0.05 U	**5.79**	**0.071**	0.05 U	**0.683**	**0.848**	0.05 U	**0.123**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	**0.19**	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	**1.66**	**0.062**	0.05 U	**4.46 D**	**0.577**	0.05 U	**0.599**		0.05 U	**2.74**	0.7 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.05 U	**0.43**	0.05 U	**0.05**	**0.07**	**0.51**	0.05 U	**2.32**	0.05 U	0.05 U	**16.6 D**	**29.9 D**	**0.76**	**0.853**	**4.72**	0.05 U	**0.727**	**3.39**	0.05 U
PAH	Pyrene	µg/g	1	78	2600	0.05 U	**0.72**	0.05 U	0.05 U	**0.22**	**1.68**	**0.16**	**12.1**	**0.137**	0.05 U	**8.16**	**11.7**	**0.373**	**0.371**	**0.701**	0.05 U	**0.796**	**0.636**	0.05 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1880 D**	**32.7**	5 U	**54.6**	**1970 D**	5 U	**88.2**	**7780 D**	100 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**1880**	**32.5**	5 U	**49.4**	**1970**	5 U	**87**	**7750**	100 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	**12**	10 U	10 U	10 U	**24**	10 U	**564**	10 U	10 U	**8100**	**212**	**13**	**2850**	**8120**	10 U	**1910**	**10300**	**13**
PHC	F2-Naphth	µg/g	10	98	230	10 U	**12**	10 U	10 U	10 U	**24**	10 U	**562**	10 U	10 U	**8100**	**212**	**13**	**2840**	**8120**	10 U	**1910**	**10300**	**13**
PHC	F3 (C16-C34)	µg/g	240	300		50 U	**443**	50 U	50 U	**324**	**231**	**56**	**463**	50 U	50 U	**7480**	**289**	50 U	**1060**	**2050**	50 U	**1020**	**9090**	50 U
PHC	F3-PAH	µg/g	240	300		50 U	**439**	50 U	50 U	**323**	**225**	**55**	**405**	50 U	50 U	**7440**	**228**	50 U	**1050**	**2040**	50 U	**1020**	**9080**	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	**576**	50 U	50 U	**133**	**146**	50 U	**52**	50 U	50 U	**2070**	**56**	50 U	**113**	**166**	50 U	**193**	**3490**	50 U
PHC	F4G-SG	µg/g	120	2800			**1500**																	
PHC	**Chrom. to baseline at nC5No**	None				Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	**1030**	72 U	72 U	**457**	**401**	72 U	**1080**	72 U	72 U	**19500**	**590**	72 U	**4070**	**12300**	72 U	**3210**	**30700**	120 U
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	20 U	0.15 U	0.05 U	0.65 U	5.3 U	0.05 U	0.35 U	25 U	1 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	20 U	0.05 U	0.05 U	0.05 U	7.5 U	0.05 U	0.35 U	4 U	1 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	3 U	0.05 U	0.05 U	0.1 U	1.3 U	0.05 U	0.1 U	4 U	1 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.07 U	4 U	1 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH53-15	BH55-15	BH55-15	BH55-15	BH56-15	BH56-15	BH56-15	BH57-15	BH57-15	BH57-15	BH59-15	BH59-15	BH59-15	BH60-15	BH60-15	BH60-15	BH61-15	BH61-15	BH61-15
					Sample ID	S-11102463-081915-TB-433	S-11102463-081315-PH-401	S-11102463-081315-PH-402	S-11102463-081315-PH-403	S-11102463-081215-RK-308	S-11102463-081215-RK-309	S-11102463-081215-RK-310	S-11102463-111915-KMV-191	S-11102463-111915-KMV-192	S-11102463-111915-KMV-193	S-11102463-110315-TB-481	S-11102463-110315-TB-482	S-11102463-110315-TB-483	S-11102463-111115-TB-501	S-11102463-111115-TB-502	S-11102463-111115-TB-503	S-11102463-110215-TB-478	S-11102463-110215-TB-479	S-11102463-110215-TB-480
					Start Depth	6.85	0.76	3.04	6.85	0.76	3.04	5.33	1.52	4.57	6.09	0.76	2.28	6.09	0.76	2.28	6.09	0.76	2.28	5.33
					End Depth	7.46	1.37	3.65	7.46	1.37	3.65	5.94	2.13	5.18	6.7	1.37	2.89	6.4	1.37	2.89	6.7	1.37	2.89	5.94
					Date	19 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	19 Nov 2015	19 Nov 2015	19 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	02 Nov 2015	02 Nov 2015	02 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.85 U	0.042 U	0.042 U	0.042 U	0.6 U	0.042 U	0.042 U	3.4 U	0.85 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	40 U	10 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	40 U	10 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	40 U	10 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.0078**	**0.01**	0.0068 U	0.0068 U	0.0068 U	**0.0078**	0.0068 U	**0.0217**	0.0068 U	0.0068 U	**1.57 D**	**0.0564**	0.0068 U	**1.04**	0.14 U	0.0068 U	**0.313**	**7.95 D**	0.14 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	20 U	1 U	0.05 U	0.05 U	18 U	0.05 U	1.6 U	15 U	1 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	10 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.25 U	0.05 U	0.05 U	11 U	0.05 U	0.45 U	4 U	1 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.6 U	0.03 U	0.03 U	0.03 U	0.6 U	0.03 U	0.03 U	2.4 U	0.6 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	**0.1**	0.05 U	0.2 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.36 U	**0.079**	0.018 U	**0.584**	**1.37**	0.018 U	**0.754**	**18.3 D**	0.36 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.8 D**	**0.222**	0.05 U	**2.07**	**42.2 D**	0.05 U	**0.981**	**98.4 D**	1 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	4 U	1 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.14**	0.08 U	0.08 U	0.08 U	0.08 U	1.6 U	0.08 U	0.08 U	**1.39**	0.24 U	0.08 U	0.08 U	6.4 U	1.6 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.6 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	2.4 U	0.6 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.026**	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.8 U	0.2 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	4 U	1 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.4 U	0.02 U	0.02 U	0.02 U	0.4 U	0.02 U	0.02 U	1.6 U	0.4 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.4 U	0.02 U	0.02 U	**0.428**	0.25 U	0.02 U	**0.037**	1.6 U	0.4 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.08**	**0.03**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.035**	0.03 U	0.03 U	**0.8 D**	0.03 U	0.03 U	**1.72**	**1.56**	0.03 U	**0.087**	**2.9 D**	0.6 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.08**	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.8**	0.05 U	0.05 U	**2.15**	**1.56**	0.05 U	**0.124**	**2.9**	0.72 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH63-15	BH63-15	BH63-15	BH63-15	BH64-15	BH64-15	BH64-15	BH65-15	BH65-15	BH65-15	BH66-15	BH66-15	BH66-15	BH67-15	BH67-15	BH67-15	BH68-15	BH68-15
					Sample ID	S-11102463-110415-TB-484	S-11102463-110415-TB-485	S-11102463-110415-TB-486	S-11102463-110415-TB-487	S-11102463-110515-KMV-175	S-11102463-110515-KMV-176	S-11102463-110515-KMV-177	S-11102463-110415-TB-488	S-11102463-110415-TB-489	S-11102463-110415-TB-490	S-11102463-110915-TB-504	S-11102463-110915-TB-505	S-11102463-110915-TB-506	S-11102463-110415-KMV-172	S-11102463-110415-KMV-173	S-11102463-110415-KMV-174	S-11102463-111215-TB-527	S-11102463-111215-TB-528
					Start Depth	0.76	2.28	6.09	6.09	0.76	2.28	6.85	0	2.28	5.33	0	2.28	6.09	1.52	3.04	6.09	0	1.52
					End Depth	1.37	2.89	6.7	6.7	1.37	2.89	7.46	0.6	2.89	5.94	0.6	2.89	6.7	2.13	3.65	6.7	0.6	2.13
					Date	04 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	12 Nov 2015	12 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**8.58**	**33.4**	**11.2**	**13.8**	**10.5**	**14.7**	**17.8**	**14.5**	**40.6**	**47.8**	**12.5**	**12.4**	**40.8**	**9.53**	**17**	**22.2**	**11.5**	**15**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.65**	**7.37**	**7.87**	**7.99**	**7.98**	**7.94**	**7.75**	**8.26**	**6.99**	**7.19**	**7.67**	**9.23**	**7.23**	**8.44**	**7.78**	**7.16**	**8.51**	**7.92**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**8.58**	**33.4**	**11.2**	**13.8**	**10.5**	**14.7**	**17.8**	**14.5**	**40.6**	**47.8**	**12.5**	**12.4**	**40.8**	**9.53**	**17**	**22.2**	**11.5**	**15**
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	**6.2**	1 U	1 U	**1.5**	1 U	1 U	**2.3**	**4.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	**51.1**	**2**	**2.9**	**8**	**1.3**	**1.1**	**6.5**	**4**	**1.2**	**2.3**	**1.2**	**2**	1 U	**1.5**	**2.2**	**4.6**	**1.7**
INORGANIC	Barium	µg/g	220	390		**10.2**	**253**	**31.7**	**33.4**	**107**	**7.4**	**15.2**	**136**	**1210**	**54.5**	**33.9**	**15**	**93.3**	**7.5**	**9.9**	**65.1**	**128**	**40.7**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**4.19**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.55**	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	**12**	5 U	5 U	**6.5**	5 U	5 U	**5.7**	**7.6**	5 U	5 U	5 U	**6.6**	5 U	5 U	**5.5**	**13.9**	**6.2**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	**2.3**	0.1 U	0.1 U	**0.82**	0.1 U	**0.25**	**0.85**	**0.96**	**2.45**	**0.5**	0.1 U	**0.67**	**0.31**	**0.15**	**0.48**	**1.52**	**0.74**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.12**	**0.65**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**3.6**	**20.3**	**7.5**	**9.7**	**22.6**	**4.8**	**5.3**	**25.9**	**32.8**	**7.2**	**9.5**	**4.6**	**16.3**	**5.9**	**5.7**	**15.2**	**23.7**	**13.1**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.5**	**7.3**	**2.9**	**3.6**	**5.9**	**1.6**	**2.2**	**5.3**	**33.7**	**3.1**	**3**	**1.8**	**5.3**	**2.5**	**2.2**	**5.1**	**7.1**	**5.2**
INORGANIC	Copper	µg/g	92	140		**1.9**	**342**	**6.3**	**20.2**	**34.1**	**2.1**	**3**	**242**	**213**	**12.2**	**13.6**	**4.2**	**12.5**	**2.7**	**2.8**	**13.7**	**27.7**	**10**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.169**	**0.321**	**0.134**	**0.129**	**0.509**	**0.184**	**0.164**	**0.256**	**0.307**	**0.601**	**0.395**	**0.192**	**0.383**	**0.301**	**0.172**	**0.253**	**0.574**	**0.387**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**11.3**	**917**	**10.5**	**16.3**	**283**	**6.4**	**4.8**	**3070**	**697**	**22.6**	**26.6**	**4.3**	**40.5**	**5.5**	**2.6**	**10.7**	**125**	**25.7**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0172**	**1.15 D**	**0.0131**	**0.0107**	**0.263**	**0.0066**	**0.015**	**14.5 D**	**1.11 D**	**0.037**	**0.0707**	**0.0081**	**0.225**	**0.0069**	**0.006**	**0.0722**	**0.13**	**0.0185**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	**3.5**	1 U	1 U	**2.2**	1 U	1 U	**5.9**	**2.5**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1**	1 U
INORGANIC	Nickel	µg/g	82	100		**2.7**	**89.6**	**7.5**	**8.5**	**18.1**	**3.1**	**4**	**19.7**	**62.9**	**6.2**	**8.7**	**3.9**	**11.4**	**5**	**3.7**	**10.7**	**18.7**	**10.5**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	**2.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	**0.9**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.26**	**0.95**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			0.1 U			**1.31**		**0.24**	0.1 U	**1.64**		**0.38**		**0.85**	**0.7**	**0.37**	**0.38**	**0.14**	**0.54**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.77**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.5**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**9.1**	**20.3**	**10.2**	**13.2**	**33.5**	**11**	**9.5**	**25.9**	**32.2**	**11.8**	**13.4**	**8.7**	**21.4**	**12.3**	**13.2**	**21.2**	**29.9**	**19.8**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**8.7**	**274**	**18.5**	**24.7**	**167**	**8.1**	**12.3**	**297**	**283**	**17.8**	**61.5**	**14.2**	**44.4**	**10.4**	**9.6**	**37.5**	**162**	**27.2**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH63-15	BH63-15	BH63-15	BH63-15	BH64-15	BH64-15	BH64-15	BH65-15	BH65-15	BH65-15	BH66-15	BH66-15	BH66-15	BH67-15	BH67-15	BH67-15	BH68-15	BH68-15
					Sample ID	S-11102463-110415-TB-484	S-11102463-110415-TB-485	S-11102463-110415-TB-486	S-11102463-110415-TB-487	S-11102463-110515-KMV-175	S-11102463-110515-KMV-176	S-11102463-110515-KMV-177	S-11102463-110415-TB-488	S-11102463-110415-TB-489	S-11102463-110415-TB-490	S-11102463-110915-TB-504	S-11102463-110915-TB-505	S-11102463-110915-TB-506	S-11102463-110415-KMV-172	S-11102463-110415-KMV-173	S-11102463-110415-KMV-174	S-11102463-111215-TB-527	S-11102463-111215-TB-528
					Start Depth	0.76	2.28	6.09	6.09	0.76	2.28	6.85	0	2.28	5.33	0	2.28	6.09	1.52	3.04	6.09	0	1.52
					End Depth	1.37	2.89	6.7	6.7	1.37	2.89	7.46	0.6	2.89	5.94	0.6	2.89	6.7	2.13	3.65	6.7	0.6	2.13
					Date	04 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	12 Nov 2015	12 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**19**	**3.44**	**1.64**	**2.23**	**0.329**	**77.3**	**0.974**	**7.73**	**26.5**	**0.122**	**0.174**	**38.5**	**173**	0.042 U	**0.181**	**0.138**	**0.748**	**2.92**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**18.9 D**	**2.41**	**0.736**	**0.981**	**0.146**	**26.6**	**0.436**	**2.69 D**	**24 D**	**0.085**	**0.072**	**38.1 D**	**69.5 D**	0.03 U	**0.125**	**0.09**	**0.33**	**2.16**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.113**	**1.03**	**0.901**	**1.25**	**0.183**	**50.8**	**0.538**	**5.04 D**	**2.45 D**	**0.037**	**0.102**		**104 D**	0.03 U	**0.056**	**0.049**	**0.418**	**0.769**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**1.75**	**1.07**	**0.572**	**0.6**	**0.158**	**0.687**	**0.162**	**7.81 D**	**2.01 D**	0.05 U	0.05 U	**2.8**	**73.7 D**	0.05 U	0.05 U	**0.45**	**0.558**	**0.138**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.416**	**0.238**	**0.056**	**0.069**	**0.128**	0.15 U	0.05 U	**0.76 D**	0.14 U	0.05 U	**0.056**	**0.414**	**6.77**	0.05 U	0.05 U	**0.134**	**0.159**	**0.075**
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.371**	**0.483**	**0.223**	**0.268**	**0.269**	**0.207**	**0.171**	**16.5 D**	**0.181**	0.05 U	**0.074**	**4.56**	**30.2 D**	0.05 U	0.05 U	**0.518**	**1.18**	**0.1**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.118**	**0.855**	**0.129**		**1.18**	**0.075**	**0.161**	**23.9 D**	**0.202**	0.05 U	**0.265**	**2.23**	**19.2 D**	0.05 U	0.05 U	**0.57**	**3.08**	**0.279**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	**0.842**	**0.085**	**0.11**	**1.16**	0.05 U	**0.11**	**19.5 D**	**0.154**	0.05 U	**0.265**	**1.21**	**11.7**	**0.066**	0.05 U	**0.395**	**2.76**	**0.274**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13		**1.36**	**0.065**	**0.079**	**1.6**	0.05 U	**0.104**	**22.5 D**	**0.171**	0.05 U	**0.359**	**0.457**	**8.21**	**0.075**	0.05 U	**0.38**	**3.41**	**0.348**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	**0.667**	0.05 U	0.05 U	**0.72**	0.05 U	0.05 U	**9.62 D**	**0.061**	0.05 U	**0.236**	**0.821**	**4.24**	**0.081**	0.05 U	**0.166**	**1.57**	**0.202**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	**0.49**	0.05 U	0.05 U	**0.455**	0.05 U	0.05 U	**9.41 D**	0.05 U	0.05 U	**0.106**		**3.34**	0.05 U	0.05 U	**0.12**	**1.29**	**0.113**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.272**	**1.35**	**0.135**	**0.148**	**1.25**	**0.075**	**0.155**	**25 D**	**0.222**	0.05 U	**0.259**	**3.3**	**16.6**	**0.06**	0.05 U	**0.635**	**2.95**	**0.315**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	**0.13**	0.05 U	0.05 U	**0.179**	0.05 U	0.05 U	**2.84 D**	0.05 U	0.05 U	0.05 U	**0.129**	**1.06**	0.05 U	0.05 U	0.05 U	**0.369**	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**2.66**	**0.226**	**0.273**	**3.16**	**0.096**	**0.291**	**59.4 D**	**0.36**	0.05 U	**0.428**	**1.27**	**35 D**	**0.089**	0.05 U	**1.04**	**7.04**	**0.511**
PAH	Fluorene	µg/g	0.19	62	62	**2.48**	**1.01**	**0.266**	**0.325**	**0.198**	**0.963**	**0.147**	**13.2 D**	**0.64 D**	0.05 U	0.05 U	**4.82**	**39.9 D**	0.05 U	0.05 U	**0.379**	**0.775**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	**0.633**	0.05 U	0.05 U	**0.8**	0.05 U	0.05 U	**10.1 D**	**0.056**	0.05 U	**0.241**	**0.28**	**4.36**	0.05 U	0.05 U	**0.152**	**1.67**	**0.185**
PAH	Naphthalene	µg/g	0.09	0.6	200	0.6 U	**3.42**	**0.947**	**1.17**	**0.192**	**29.7**	**0.335**	**11.8 D**	**3.63 D**	**0.672**	**0.076**		**200 D**	0.05 U	0.05 U	**0.067**	**0.83**	**1.13**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**5.71**	**4.06**	**0.779**	**0.916**	**2.01**	**1.92**	**0.515**	**70.1 D**	**1.32 D**	0.05 U	**0.258**	**26 D**	**111 D**	**0.064**	**0.078**	**1.54**	**5.1**	**0.665**
PAH	Pyrene	µg/g	1	78	2600	**0.578**	**2.63**	**0.351**	**0.427**	**2.53**	**0.386**	**0.384**	**45.2 D**	**0.7 D**	0.05 U	**0.391**	**9.28**	**50.8 D**	**0.097**	0.05 U	**1.4**	**5.73**	**0.552**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**831 D**	**94.9**	250 U	**120 D**	20 U	**5460 D**	**22**	20 U	**2780 D**	20 U	5 U	**149**	**544 D**	**46.8**	**60.4**	5 U	5 U	**101**
PHC	F1-BTEX	µg/g	25	55	55	**831**	**92.9**	250 U	**118**	20 U	**5230**	**20.4**	20 U	**2770**	20 U	5 U	**148**	**322**	**46.6**	**60.2**	5 U	5 U	**101**
PHC	F2 (C10-C16)	µg/g	10	98	230	**2900**	**2490**	**86**	**141**	**17**	**4960**	**21**	**42**	**2680**	**22**	10 U	**6230 D**	**1400**	**45**	**15**	**44**	**19**	**731**
PHC	F2-Naphth	µg/g	10	98	230	**2900**	**2490**	**85**	**140**	**17**	**4930**	**21**	**30**	**2680**	**22**	10 U	**6230**	**1200**	**45**	**15**	**44**	**18**	**729**
PHC	F3 (C16-C34)	µg/g	240	300		**2680**	**1910**	**85**	**126**	**564**	**1040**	**63**	**1260**	**271**	**125**	**484**	**10900 D**	**2100**	**229**	50 U	**267**	**373**	**515**
PHC	F3-PAH	µg/g	240	300		**2680**	**1890**	**83**	**124**	**551**	**1040**	**62**	**995**	**268**	**125**	**481**	**10900**	**1850**	**228**	50 U	**261**	**343**	**512**
PHC	F4 (C34-C50)	µg/g	120	2800		**961**	**440**	50 U	50 U	**1050**	**155**	50 U	**672**	**69**	50 U	**194**	**2700 D**	**298**	**155**	50 U	**52**	**604**	**368**
PHC	F4G-SG	µg/g	120	2800						**2610**												**2070**	
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**7380**	**4940**	260 U	**387**	**1630**	**11600**	**107**	**1970**	**5800**	**147**	**677**	**20000**	**4340**	**475**	**76**	**362**	**995**	**1710**
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	6 U	0.5 U	2.5 U	0.25 U	0.2 U	20 U	0.05 U	0.2 U	10 U	0.2 U	0.05 U	2 U	0.4 U	0.3 U	0.2 U	0.06 U	0.05 U	0.3 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	2 U	0.2 U	10 U	0.5 U	0.2 U	4 U	0.05 U	0.2 U	20 U	0.2 U	0.05 U	0.1 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.4 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	1.6 U	0.4 U	0.05 U	0.08 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	1 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	20 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.8 U	0.09 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH63-15	BH63-15	BH63-15	BH63-15	BH64-15	BH64-15	BH64-15	BH65-15	BH65-15	BH65-15	BH66-15	BH66-15	BH66-15	BH67-15	BH67-15	BH67-15	BH68-15	BH68-15
						Sample ID	S-11102463-110415-TB-484	S-11102463-110415-TB-485	S-11102463-110415-TB-486	S-11102463-110415-TB-487	S-11102463-110515-KMV-175	S-11102463-110515-KMV-176	S-11102463-110515-KMV-177	S-11102463-110415-TB-488	S-11102463-110415-TB-489	S-11102463-110415-TB-490	S-11102463-110915-TB-504	S-11102463-110915-TB-505	S-11102463-110915-TB-506	S-11102463-110415-KMV-172	S-11102463-110415-KMV-173	S-11102463-110415-KMV-174	S-11102463-111215-TB-527	S-11102463-111215-TB-528
						Start Depth	0.76	2.28	6.09	6.09	0.76	2.28	6.85	0	2.28	5.33	0	2.28	6.09	1.52	3.04	6.09	0	1.52
						End Depth	1.37	2.89	6.7	6.7	1.37	2.89	7.46	0.6	2.89	5.94	0.6	2.89	6.7	2.13	3.65	6.7	0.6	2.13
						Date	04 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	04 Nov 2015	04 Nov 2015	04 Nov 2015	12 Nov 2015	12 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.68 U	0.042 U	2.1 U	0.085 U	0.17 U	3.4 U	0.042 U	0.17 U	0.68 U	0.17 U	0.042 U	0.042 U	0.078 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	8 U	0.5 U	25 U	1 U	2 U	40 U	0.5 U	2 U	8 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	8 U	0.5 U	25 U	1 U	2 U	40 U	0.5 U	2 U	8 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
VOC	Acetone	µg/g	0.5	16	16	8 U	0.7 U	25 U	1 U	2 U	40 U	0.5 U	2 U	8 U	2 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0011 U	**1.01**	**0.54 D**	**0.4 D**	0.027 U	0.54 U	**0.138**	**0.382 D**	**1.12 D**	**0.389 D**	**0.0374**	**0.0222**	**5.44**	**0.0439**	0.0068 U	**0.0119**	**0.0312**	**0.0211**
VOC	Bromodichloromethane	µg/g	0.05	13	50	5 U	1.3 U	13 U	1 U	0.2 U	4 U	0.05 U	0.2 U	20 U	0.2 U	0.05 U	1.5 U	0.35 U	1.2 U	1.5 U	0.05 U	0.05 U	0.15 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	3 U	0.05 U	5 U	0.25 U	0.2 U	4 U	0.05 U	0.2 U	5 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.8 U	0.6 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.2 U	0.06 U	0.35 U	0.4 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.48 U	0.03 U	1.5 U	0.06 U	0.12 U	2.4 U	0.03 U	0.12 U	0.48 U	0.12 U	0.03 U	0.03 U	0.072 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.8 U	**1.22**	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	**0.336**	0.05 U	0.05 U		
VOC	Ethylbenzene	µg/g	0.05	2	17	0.29 U	**0.314**	**1.71 D**	**0.932 D**	0.072 U	**39.4 D**	**0.236**	**0.121 D**	**0.62 D**	0.072 U	**0.036**	**0.033**	**108 D**	0.018 U	**0.045**	**0.022**	**0.021**	**0.148**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.8 U	**1.91**	**6.5 D**	**3.44 D**	0.2 U	**87.1 D**		**0.51 D**	**8.35 D**	0.2 U	**0.055**	**0.501**	**0.161**	**1.17**	**1.49**	0.05 U		
VOC	Styrene	µg/g	0.05	0.7	66	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	1.3 U	0.08 U	4 U	0.16 U	0.32 U	6.4 U	0.08 U	**0.44 D**	1.3 U	0.32 U	**0.132**	**0.081**	**2.69**	0.08 U	0.08 U	**0.099**	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.48 U	0.03 U	1.5 U	0.06 U	0.12 U	2.4 U	0.03 U	0.12 U	0.48 U	0.12 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.16 U	0.01 U	0.5 U	0.02 U	0.04 U	0.8 U	0.01 U	0.04 U	0.16 U	0.04 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.8 U	0.05 U	2.5 U	0.1 U	0.2 U	4 U	0.05 U	0.2 U	0.8 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.32 U	0.02 U	1 U	0.04 U	0.08 U	1.6 U	0.02 U	0.08 U	0.32 U	0.08 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.32 U	**0.094**	1 U	**0.078 D**	0.08 U	**11.7 D**	**0.118**	**0.132 D**	0.32 U	0.08 U	**0.043**	**0.076**	**34.1 D**	**0.047**	0.02 U	0.02 U	**0.025**	**0.034**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.48 U	**0.495**	1.5 U	**0.532 D**	0.12 U	**176 D**	**1.06**	**0.59 D**	**0.99 D**	**0.87 D**	**0.151**	**0.12**	**72.2 D**	**0.156**	**0.186**	**0.093**	**0.063**	**0.222**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.58 U	**0.589**	1.8 U	**0.61**	0.14 U	**187**	**1.18**	**0.73**	**0.99**	**0.87**	**0.194**	**0.196**	**106**	**0.203**	**0.186**	**0.093**	**0.088**	**0.256**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH68-15	BH69-15	BH69-15	BH69-15	BH71-15	BH71-15	BH71-15	BH71-15	BH72-15	BH72-15	BH72-15	BH72-15	BH73-15	BH73-15	BH73-15	BH74-15	BH74-15	BH74-15	BH74-15
					Sample ID	S-11102463-111215-TB-529	S-11102463-110515-TB-491	S-11102463-110515-TB-492	S-11102463-110515-TB-493	S-11102463-110315-KMV-168	S-11102463-110315-KMV-169	S-11102463-110315-KMV-170	S-11102463-110315-KMV-171	S-11102463-110915-TB-507	S-11102463-110915-TB-508	S-11102463-110915-TB-509	S-11102463-110915-TB-510	S-11102463-110515-TB-494	S-11102463-110515-TB-495	S-11102463-110515-TB-496	S-11102463-110515-TB-497	S-11102463-110515-TB-498	S-11102463-110515-TB-499	S-11102463-110515-TB-500
					Start Depth	4.57	0.76	1.52	4.87	0	2.28	6.09	6.09	0.76	2.28	2.28	5.33	0	3.04	5.33	0	0	2.28	6.09
					End Depth	5.18	1.37	2.13	5.18	0.6	2.89	6.7	6.7	1.37	2.89	2.89	5.94	0.6	3.65	5.94	0.6	0.6	2.89	6.7
					Date	12 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**33.6**	**10.6**	**10.8**	**42.9**	**8.26**	**16.8**	**34**	**29.8**	**8.91**	**15.4**	**16.2**	**58.4**	**10.3**	**38.4**	**18.1**	**7.22**	**7**	**16.5**	**18.9**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.38**	**7.48**	**7.78**	**7.09**	**8.44**	**7.77**	**6.9**	**6.97**	**7.92**	**7.85**	**7.83**	**7.14**	**7.77**	**7.38**	**7.56**	**7.58**	**7.59**	**7.88**	**7.67**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**33.6**	**10.6**	**10.8**	**42.9**	**8.26**	**16.8**	**34**	**29.8**	**8.91**	**15.4**	**16.2**	**58.4**	**10.3**	**38.4**	**18.1**	**7.22**	**7**	**16.5**	**18.9**
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	**1.8**	1 U	1 U	**2**	1 U	1 U	1 U	**7**	1 U	1 U	1 U	**29.6**	**4.9**	1 U	**1.2**	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**3**	**1.7**	1 U	**2.1**	**3.7**	**1.9**	**3**	**3.3**	**5.8**	**1.3**	**1.5**	**3.5**	**5.2**	**24.6**	**1.7**	**10.7**	**4.6**	**3.4**	1 U
INORGANIC	Barium	µg/g	220	390		**52.6**	**21.8**	**8.1**	**113**	**55.4**	**13.6**	**101**	**116**	**179**	**11.8**	**12.6**	**83.2**	**55.5**	**511**	**14.9**	**66.5**	**42.9**	**29.4**	**5.8**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.53**	0.5 U	0.5 U	0.5 U	**0.56**	0.5 U	**0.77**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**6.2**	5 U	5 U	**6.7**	**6.7**	5 U	**7**	**8.8**	**21.8**	5 U	5 U	**9.1**	**7.2**	**14.3**	5 U	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.76**	**0.26**	0.1 U	**1.29**	**0.88**	**0.44**	**0.58**	**0.63**	**3.07**	**0.19**	**0.13**	**0.4**	**1.1**	**1.04**	0.1 U	**0.49**	**0.57**	0.1 U	0.1 U
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2.39**	0.5 U	0.5 U	0.5 U	0.5 U	**1.34**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**13.4**	**6.6**	**4.3**	**20.6**	**12.9**	**7.2**	**23.6**	**27.2**	**61**	**5**	**5.2**	**23.4**	**14.9**	**25.7**	**4.4**	**44.7**	**17.6**	**6**	**2.9**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**4.7**	**2.4**	**1.9**	**7**	**3.4**	**2.9**	**6.6**	**7.8**	**6.8**	**1.8**	**2.2**	**9.6**	**5.9**	**10.9**	**1.7**	**4.2**	**3.4**	**3.2**	**1.3**
INORGANIC	Copper	µg/g	92	140		**9.2**	**11.8**	**2.2**	**17.4**	**17.5**	**4.2**	**21.1**	**23.4**	**972**	**6.3**	**5.1**	**23.4**	**28.3**	**284**	**8.6**	**32**	**22.5**	**15**	**2.2**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.266**	**0.246**	**0.281**	**0.443**	**0.717**	**0.209**	**0.28**	**0.308**	**0.913**	**0.125**	**0.146**		**0.505**	**0.547**	**0.141**	**0.95**	**0.943**	**0.262**	**0.0963**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**10.3**	**2300**	**5.4**	**50.4**	**242**	**4.2**	**22.7**	**21**	**310**	**4.8**	**5.1**	**8.5**	**443**	**667**	**67**	**120**	**100**	**36.1**	**3**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0359**	**0.0697**	**0.0068**	**0.0214**	**0.188**	**0.0063**	**0.166**	**0.143**	**2.16 D**	**0.0191**	**0.0446**	**0.0225**	**0.308**	**7.68 D**	**0.0547**	**10.3 D**	**7.29 D**	**0.224**	**0.0064**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4.2**	1 U	1 U	1 U	1 U	**4.4**	1 U	**11.5**	**3.4**	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**9.7**	**5.3**	**3.1**	**16.6**	**9**	**5.1**	**15**	**18**	**39.9**	**4.2**	**4.9**	**22.6**	**13.7**	**36.3**	**4.4**	**13.2**	**8.6**	**7.7**	**2.8**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.9**	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.75**	0.2 U	0.2 U	0.2 U	0.2 U	**1.09**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.24**	**0.69**		**0.38**	**0.4**		**0.39**	**0.4**	**0.17**			**0.2**	**0.27**	**1.18**		**4.94**	**5.87**		
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**19.5**	**14.7**	**10**	**27.9**	**21**	**13.6**	**28.4**	**32.9**	**28.7**	**7.7**	**8**	**32.4**	**21.9**	**31.7**	**6.8**	**14.2**	**12.3**	**10.8**	**5.4**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.068**	0.05 U	0.05 U	**0.094**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**33.4**	**37.6**	**8.7**	**39**	**62.9**	**12.3**	**64.7**	**66.8**	**649**	**16.5**	**18.5**	**52.2**	**71.5**	**822**	**131**	**66.9**	**52.7**	**27.2**	**8.1**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH68-15	BH69-15	BH69-15	BH69-15	BH71-15	BH71-15	BH71-15	BH71-15	BH72-15	BH72-15	BH72-15	BH72-15	BH73-15	BH73-15	BH73-15	BH74-15	BH74-15	BH74-15	BH74-15
					Sample ID	S-11102463-111215-TB-529	S-11102463-110515-TB-491	S-11102463-110515-TB-492	S-11102463-110515-TB-493	S-11102463-110315-KMV-168	S-11102463-110315-KMV-169	S-11102463-110315-KMV-170	S-11102463-110315-KMV-171	S-11102463-110915-TB-507	S-11102463-110915-TB-508	S-11102463-110915-TB-509	S-11102463-110915-TB-510	S-11102463-110515-TB-494	S-11102463-110515-TB-495	S-11102463-110515-TB-496	S-11102463-110515-TB-497	S-11102463-110515-TB-498	S-11102463-110515-TB-499	S-11102463-110515-TB-500
					Start Depth	4.57	0.76	1.52	4.87	0	2.28	6.09	6.09	0.76	2.28	2.28	5.33	0	3.04	5.33	0	0	2.28	6.09
					End Depth	5.18	1.37	2.13	5.18	0.6	2.89	6.7	6.7	1.37	2.89	2.89	5.94	0.6	3.65	5.94	0.6	0.6	2.89	6.7
					Date	12 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.564**	**28.9**	**194**	**10.6**	**0.518**	**0.638**	**0.301**	**0.21**	**1.17**	**17.1**	**5.49**	**1.47**	**1.1**	**140**	**24.3**	**137**	**109**	**109**	**0.794**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.373**	**14.6 D**	**83 D**	**4.89 D**	**0.203**	**0.216**	**0.14**	**0.102**	**0.497**	**7.33**	**2.69**	**0.607 D**	**0.483**	**61 D**	**9.97 D**	**91.8 D**	**74.2 D**	**61.3**	**0.521**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.191**	**14.4 D**	**111 D**	**5.68 D**	**0.316**	**0.422**	**0.161**	**0.108**	**0.672**	**9.78**	**2.8**	**0.859 D**	**0.618**	**78.8 D**	**14.3 D**	**45.7 D**	**35 D**	**47.6**	**0.274**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.213**	**1.03 D**	**3.91 D**	**4.53 D**	0.05 U	0.05 U	**0.642**	**0.675**	**0.805**	**1.14**	**0.427**	**0.808 D**	**0.131**	**60.6 D**	**9.83 D**	**8.33 D**	**7.17 D**	**3.54**	**0.839**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.25 U	0.85 U	**0.41**	0.05 U	0.05 U	**0.471**	**0.301**	**0.94**	**0.177**	**0.066**	**0.109 D**	0.05 U	**4.94 D**	**0.91 D**	1.3 U	1.1 U	**0.591**	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	**0.28 D**	**1.42 D**	**1.98 D**	**0.059**	0.05 U	**1.39**	**1.22**	**0.903**	**0.631**	**0.222**	**0.409 D**	**0.217**	**22.1 D**	**4.69 D**	**3.09 D**	**2.36 D**	**0.83**	**0.179**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.47 D**	**1.43 D**	**1.14 D**		0.05 U	**1.79**	**1.21**	**2.36**				**0.572**	**13.7 D**	**2.34 D**	**1.81 D**	**1.33 D**	**0.092**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.066**	**0.5 D**	**0.78 D**	**0.79 D**	**0.112**	0.05 U	**1.19**	**0.863**	**2.43**	**0.299**	**0.106**	**0.226 D**	**0.5**	**10.2 D**	**1.63 D**	**1.01 D**	**0.76 D**	0.05 U	**0.09**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.065**	**0.3 D**		**0.57 D**	**0.169**	0.05 U	**1.12**	**0.8**	**2.99**	**0.241**	**0.089**	**0.191 D**	**0.633**	**8.15 D**	**1.19 D**	**0.96 D**	**0.8 D**	**0.051**	**0.066**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	**0.69 D**	**0.51 D**	**0.241**	**0.139**	0.05 U	**0.51**	**0.384**	**1.63**	**0.122**	0.05 U	**0.084 D**	**0.365**	**4.11 D**	**0.55 D**	**0.73 D**	**0.6 D**	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	**0.13**	**0.053**	0.05 U	**0.392**	**0.302**	**0.802**	**0.065**	0.05 U	0.075 U	**0.149**	**2.97 D**	**0.254**	**0.167**	**0.084**	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.072**	**0.41 D**	**2.53 D**	**1.05 D**	**0.124**	0.05 U	**1.86**	**1.29**	**2.36**	**0.546**	**0.194**	**0.313 D**	**0.61**	**12.7 D**	**2.26 D**	**1.6 D**	**1.25 D**	**0.152**	**0.115**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	**0.107**	**0.105**	**0.064**	0.05 U	0.05 U	**0.135**	**0.108**	**0.334**	0.05 U	0.05 U	0.075 U	**0.075**	**1.05 D**	**0.133**	**0.189**	**0.147**	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.152**	**0.33 D**	**0.92 D**	**2.09 D**	**0.196**	**0.052**	**3.08**	**2.2**	**3.75**	**0.762**	**0.289**	**0.61 D**	**1.17**	**25.7 D**	**4.3 D**	**3.16 D**	**2.28 D**	**0.201**	**0.203**
PAH	Fluorene	µg/g	0.19	62	62	**0.106**	**1.2 D**	**5.67 D**	**1.98 D**	0.05 U	0.05 U	**0.794**	**0.754**	**0.711**	**1.08**	**0.399**	**0.423 D**	**0.105**	**24.8 D**	**4.8 D**	**11.9 D**	**9.19 D**	**4.24**	**0.198**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	**0.22 D**	**0.134**	**0.236**	**0.108**	0.05 U	**0.539**	**0.337**	**1.45**	**0.11**	0.05 U	**0.09 D**	**0.296**	**3.65 D**	**0.485**	**0.451**	**0.343**	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.524**	**0.91 D**	**2.62 D**	**24.7 D**	**0.228**	**0.975**	**0.092**	**0.065**	**0.864**	**3.17**	**0.953**	**0.915 D**	**0.328**	**82.1 D**	**17.3 D**	**6.68 D**	**8.72 D**	**2.01**	**0.122**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.171**	**2.36 D**	**12.9 D**	**6.68 D**	**0.225**	0.05 U	**3.85**	**3.59**	**2.85**	**2.92**	**1.06**	**1.56 D**	**1.18**	**74.4 D**	**13.7 D**	**30.7 D**	**21.8 D**	**5.38**	**0.553**
PAH	Pyrene	µg/g	1	78	2600	**0.181**	**1.88 D**	**4.81 D**	**3.05 D**	**0.217**	**0.06**	**4.33**	**3**	**4.18**	**1.25**	**0.451**	**0.855 D**	**1.15**	**35.8 D**	**6.61 D**	**15 D**	**11.9 D**	**0.522**	**0.313**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	**31.8**	80 U	160 U	50 U	5 U	**262 D**	5 U	**5.2**	5 U	**3610 D**	**2930 D**	7.5 U	20 U	**35.1**	10 U	**890 D**	**1580 D**	**219 D**	5 U
PHC	F1-BTEX	µg/g	25	55	55	**28.9**	80 U	160 U	50 U	5 U	**262**	5 U	**5**	5 U	**3590**	**2910**	7.5 U	20 U	**26.3**	10 U	**890**	**1570**	**212**	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**26**	**3080**	**9670**	**158**	**15**	**163**	**54**	**20**	**15**	**1730**	**565**	**17 D**	**12**	**1100**	**210**	**6880**	**6520**	**3240**	**14**
PHC	F2-Naphth	µg/g	10	98	230	**25**	**3080**	**9660**	**134**	**15**	**162**	**54**	**20**	**14**	**1730**	**564**	**16**	**11**	**1020**	**193**	**6870**	**6510**	**3240**	**14**
PHC	F3 (C16-C34)	µg/g	240	300		**63**	**5780**	**11000**	**368**	**248**	**53**	**361**	**160**	**1170**	**893**	**361**	**82 D**	**178**	**2320**	**387**	**19500**	**17900**	**1440**	50 U
PHC	F3-PAH	µg/g	240	300		**62**	**5780**	**11000**	**353**	**247**	**53**	**344**	**148**	**1150**	**887**	**359**	**78**	**172**	**2140**	**356**	**19500**	**17900**	**1440**	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	**2050**	**3220**	**123**	**344**	50 U	**74**	50 U	**693**	**284**	**121**	75 U	**164**	**331**	**52**	**5020**	**4040**	**116**	50 U
PHC	F4G-SG	µg/g	120	2800			**6030**			**1130**				**2710**							**15200**	**14200**		
PHC	**Chrom. to baseline at nC5No**	None				Yes	No U	Yes	Yes	No U	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	No U	No U	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**120**	**10900**	**23900**	**649**	**607**	**478**	**489**	**185**	**1880**	**6520**	**3980**	110 U	**354**	**3780**	**649**	**32300**	**30000**	**5020**	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.3 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.12 U	0.15 U	13 U	14 U	0.15 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	3 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	17 U	14 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	**2.2 D**	0.4 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH68-15	BH69-15	BH69-15	BH69-15	BH71-15	BH71-15	BH71-15	BH71-15	BH72-15	BH72-15	BH72-15	BH72-15	BH73-15	BH73-15	BH73-15	BH74-15	BH74-15	BH74-15	BH74-15
						Sample ID	S-11102463-111215-TB-529	S-11102463-110515-TB-491	S-11102463-110515-TB-492	S-11102463-110515-TB-493	S-11102463-110315-KMV-168	S-11102463-110315-KMV-169	S-11102463-110315-KMV-170	S-11102463-110315-KMV-171	S-11102463-110915-TB-507	S-11102463-110915-TB-508	S-11102463-110915-TB-509	S-11102463-110915-TB-510	S-11102463-110515-TB-494	S-11102463-110515-TB-495	S-11102463-110515-TB-496	S-11102463-110515-TB-497	S-11102463-110515-TB-498	S-11102463-110515-TB-499	S-11102463-110515-TB-500
						Start Depth	4.57	0.76	1.52	4.87	0	2.28	6.09	6.09	0.76	2.28	2.28	5.33	0	3.04	5.33	0	0	2.28	6.09
						End Depth	5.18	1.37	2.13	5.18	0.6	2.89	6.7	6.7	1.37	2.89	2.89	5.94	0.6	3.65	5.94	0.6	0.6	2.89	6.7
						Date	12 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.68 U	1.4 U	0.42 U	0.042 U	0.34 U	0.042 U	0.042 U	0.042 U	1.7 U	1.7 U	0.064 U	0.17 U	0.042 U	0.085 U	1.4 U	1.4 U	0.34 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	8 U	16 U	5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	20 U	20 U	0.75 U	2 U	0.5 U	1 U	16 U	16 U	4 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	8 U	16 U	5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	20 U	20 U	0.75 U	2 U	0.5 U	1 U	16 U	16 U	4 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	8 U	16 U	5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	20 U	20 U	1 U	2 U	0.5 U	1 U	16 U	16 U	4 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.547**	**0.14 D**	**0.37 D**	**1.29 D**	**0.215**	0.054 U	**0.029**	**0.0218**	**0.0237**	0.27 U	0.27 U	0.0001 U	**0.042 D**	**2.16**	**0.343 D**	**1.31 D**	**1.95 D**	**2.02 D**	**0.0771**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	3 U	0.05 U	0.06 U	0.05 U	46 U	38 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	17 U	16 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.48 U	0.96 U	0.3 U	0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	1.2 U	1.2 U	0.045 U	0.12 U	0.03 U	0.06 U	0.96 U	0.96 U	0.24 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.29**	0.29 U	**1.93 D**	**9.5 D**	**0.052**	**0.32 D**	0.018 U	0.018 U	**0.053**	**15.3 D**	**12.6 D**	0.036 U	0.072 U	**4.4**	**1.97 D**	**1.21 D**	**2.43 D**	**1.34 D**	**0.028**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.638**	0.8 U	1.6 U	0.5 U	**0.234**	**1.87 D**	**0.06**	**0.136**	0.05 U	**34.7 D**	**26.8 D**	0.075 U	0.2 U	**0.167**	0.1 U	**8.5 D**	**15.3 D**	**1.83 D**	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**0.149**	1.3 U	2.6 U	0.8 U	**0.377**	0.64 U	0.08 U	**0.13**	0.08 U	3.2 U	3.2 U	0.12 U	0.32 U	**0.386**	**0.18 D**	2.6 U	2.6 U	**1.99 D**	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.48 U	0.96 U	0.3 U	0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	1.2 U	1.2 U	0.045 U	0.12 U	0.03 U	0.06 U	0.96 U	0.96 U	0.24 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.16 U	0.32 U	0.1 U	0.01 U	0.08 U	0.01 U	0.01 U	0.01 U	0.4 U	0.4 U	0.015 U	0.04 U	0.01 U	0.02 U	0.32 U	0.32 U	0.08 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.8 U	1.6 U	0.5 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.075 U	0.2 U	0.05 U	0.1 U	1.6 U	1.6 U	0.4 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.32 U	0.64 U	0.2 U	0.02 U	0.16 U	0.02 U	0.02 U	0.02 U	0.8 U	0.8 U	0.03 U	0.08 U	0.02 U	0.04 U	0.64 U	0.64 U	0.16 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.179**	0.32 U	0.64 U	**0.24 D**	**0.198**	0.16 U	**0.027**	0.02 U	**0.06**	**1.57 D**	**1.27 D**	0.03 U	**0.081 D**	**0.795**	**0.609 D**	0.64 U	**1.09 D**	**0.44 D**	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**1.76**	0.48 U	**1.18 D**	0.3 U	**0.497**	0.24 U	**0.04**	0.03 U	**0.102**	**9.2 D**	**8.1 D**	0.045 U	0.12 U	**1.13**	**1.19 D**	**2.12 D**	**4.15 D**	**1.27 D**	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**1.94**	0.58 U	1.2 U	0.36 U	**0.696**	0.29 U	**0.067**	0.05 U	**0.162**	**10.7**	**9.3**	0.054 U	0.14 U	**1.93**	**1.8**	**2.1**	**5.2**	**1.71**	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH75-15	BH75-15	BH75-15	BH76-15	BH76-15	BH76-15	BH76-15	BH77-15	BH77-15	BH77-15	BH77-15	BH78-15	BH78-15	BH78-15	BH79-15	BH79-15	BH79-15	BH81-15
					Sample ID	S-11102463-101315-KMV-155	S-11102463-101315-KMV-156	S-11102463-101315-KMV-157	S-11102463-081715-TB-417	S-11102463-081715-TB-418	S-11102463-081715-TB-419	S-11102463-081715-TB-420	S-11102463-082615-KMV-144	S-11102463-082615-KMV-145	S-11102463-082615-KMV-146	S-11102463-082615-KMV-147	S-11102463-111015-TB-511	S-11102463-111015-TB-512	S-11102463-111015-TB-513	S-11102463-081715-TB-421	S-11102463-081715-TB-422	S-11102463-081715-TB-423	S-11102463-102715-TB-474
					Start Depth	0.76	3.04	6.85	1.52	3.81	3.81	6.85	3.05	6.1	9.91	6.1	0.76	1.52	3.81	1.52	2.28	6.85	0.76
					End Depth	1.37	3.65	7.46	2.13	4.41	4.41	7.46	3.66	6.71	10.52	6.71	1.37	2.13	4.41	2.13	2.89	7.46	1.37
					Date	13 Oct 2015	13 Oct 2015	13 Oct 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	10 Nov 2015	10 Nov 2015	10 Nov 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	27 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**6.01**	**19.8**	**14.9**	**18.1**	**64.7**	**62.5**	**38.5**	**15.9**	**46.8**	**68.7**	**53**	**8.64**	**12.8**	**14.8**	**10.9**	**29.9**	**20.5**	**17.1**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.57**	**7.8**	**7.76**	**7.48**	**7**	**6.99**	**7.13**	**7.78**	**6.92**	**6.92**	**7.62**	**7.7**	**7.91**	**7.74**	**7.59**	**7.49**	**7.35**	**7.48**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%															**8.64**	**12.8**	**14.8**				**17.1**
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	**1.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**2.2**	**1.2**	1 U	**4.4**	**9.8**	**3.1**	**3.2**	**1.9**	**4.5**	**2.6**	**3.2**	**2.2**	1 U	**1.2**	1 U	**2**	1 U	**4.8**
INORGANIC	Barium	µg/g	220	390		**21**	**20.8**	**10.2**	**244**	**130**	**81**	**107**	**72.3**	**108**	**143**	**60.9**	**25.9**	**11.2**	**9.6**	**6.4**	**35.1**	**14.8**	**134**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	**0.65**	0.5 U	**0.55**	0.5 U	**0.52**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.68**
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	**9.5**	**17.7**	**12.1**	**8.8**	**7.7**	**10.3**	**9**	**7.4**	5 U	5 U	5 U	5 U	5 U	5 U	**12.2**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.26**	**0.15**	0.1 U	**2.91**	**3.58**	**3.52**	**0.3**	**0.26**	**0.82**	**1.21**	**1.06**	**0.48**	**0.44**	0.1 U	**0.13**	**1.15**	**0.12**	**1.06**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**7.5**	**6.1**	**6.8**	**13.3**	**33.8**	**17.9**	**24.8**	**17.1**	**25.9**	**16**	**16.1**	**6.9**	**5.2**	**4.5**	**3.4**	**7.4**	**4.7**	**35**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.41**
INORGANIC	Cobalt	µg/g	22	22		**3**	**2.4**	**2.3**	**4.3**	**10.3**	**6.2**	**8.7**	**5.7**	**7.3**	**5.4**	**4.9**	**2.6**	**1.9**	**2.2**	**1.4**	**3.2**	**2.1**	**10.2**
INORGANIC	Copper	µg/g	92	140		**9.2**	**2.9**	**4.8**	**194**	**28.8**	**23.8**	**20.6**	**11.3**	**21.5**	**12.6**	**13.9**	**14.3**	**2.3**	**4.8**	**1.6**	**4.5**	**1.7**	**46.8**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.253**	**0.284**	**0.212**	**0.46**	**0.69**	**0.36**	**0.52**	**0.47**	**0.67**	**2.5**	**0.38**	**0.233**	**0.131**	**0.159**	**0.57**	**0.73**	**0.15**	**0.463**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**13.1**	**3.6**	**3**	**181**	**19**	**12.9**	**8.7**	**8.6**	**14.6**	**4.7**	**11.5**	**28.1**	**2.3**	**2.3**	**1.9**	**3.7**	**3.2**	**167**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0253**	**0.0078**	0.005 U	**0.11**	**0.06**	**0.03**	**0.02**	**0.0086**	**0.1**	**0.01**	**0.06**	**0.103**	**0.0076**	**0.0051**	0.005 U	**0.01**	0.005 U	**0.247**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.1**
INORGANIC	Nickel	µg/g	82	100		**5.8**	**4**	**6**	**10.6**	**24.5**	**13.9**	**19.1**	**12.4**	**17.3**	**12.1**	**11.3**	**5.2**	**3.4**	**4.2**	**2.7**	**6.1**	**4.3**	**31.5**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.15**	**0.1**		**3.01**	**2.66**	**2**	**1.71**	**1.53**	**0.94**	**0.19**	**1.26**	**0.13**	**0.15**	0.1 U	**4.26**	**2.14**	**0.57**	**0.53**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**13.4**	**11.9**	**7**	**17.2**	**42.6**	**24.9**	**33.2**	**25.8**	**31.5**	**23.3**	**20.1**	**13.4**	**10.9**	**8.6**	**8.1**	**12.8**	**6.9**	**37.4**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	**0.1**	0.05 U	0.05 U	**0.05**	**0.16**	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.054**
INORGANIC	Zinc	µg/g	290	340		**24.4**	**10.9**	**14.4**	**688**	**82.6**	**59.5**	**50.2**	**28.9**	**55.9**	**29.8**	**39.1**	**38.2**	**9.6**	**10.6**	**7**	**17.1**	**9**	**176**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH75-15	BH75-15	BH75-15	BH76-15	BH76-15	BH76-15	BH76-15	BH77-15	BH77-15	BH77-15	BH77-15	BH78-15	BH78-15	BH78-15	BH79-15	BH79-15	BH79-15	BH81-15
					Sample ID	S-11102463-101315-KMV-155	S-11102463-101315-KMV-156	S-11102463-101315-KMV-157	S-11102463-081715-TB-417	S-11102463-081715-TB-418	S-11102463-081715-TB-419	S-11102463-081715-TB-420	S-11102463-082615-KMV-144	S-11102463-082615-KMV-145	S-11102463-082615-KMV-146	S-11102463-082615-KMV-147	S-11102463-111015-TB-511	S-11102463-111015-TB-512	S-11102463-111015-TB-513	S-11102463-081715-TB-421	S-11102463-081715-TB-422	S-11102463-081715-TB-423	S-11102463-102715-TB-474
					Start Depth	0.76	3.04	6.85	1.52	3.81	3.81	6.85	3.05	6.1	9.91	6.1	0.76	1.52	3.81	1.52	2.28	6.85	0.76
					End Depth	1.37	3.65	7.46	2.13	4.41	4.41	7.46	3.66	6.71	10.52	6.71	1.37	2.13	4.41	2.13	2.89	7.46	1.37
					Date	13 Oct 2015	13 Oct 2015	13 Oct 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	10 Nov 2015	10 Nov 2015	10 Nov 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	27 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**16.1**	0.21 U	**71.2**	**0.27**	**0.23**	**0.18**	0.042 U	0.042 U	**0.04**	0.085 U	0.064 U	**2.01**	**9.92**	0.042 U	0.042 U	0.042 U	0.042 U	**0.119**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**7.59 D**	0.15 U	**28.8 D**	**0.12**	**0.11 D**	**0.08 D**	0.03 U	0.03 U	**0.04**	0.06 U	**0.04 M**	**0.87**	**4.44**	**0.032**	0.03 U	0.03 U	0.03 U	**0.049**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**8.52 D**	0.15 U	**42.4 D**	**0.15**	**0.12 D**	**0.1 D**	0.03 U	0.03 U	0.03 U	0.06 U	0.045 U	**1.14**	**5.49**	0.03 U	0.03 U	0.03 U	0.03 U	**0.07**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.27 D**	0.25 U	**29.3 D**	**0.13**	**1.19 D**	**0.86 D**	0.05 U	0.05 U	**0.35**	0.1 U	**0.54 M**	**0.362**	**0.282**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.25 U	0.25 U	**2.5 D**	**0.13**	0.1 U	0.1 U	0.05 U	0.05 U	**0.07**	0.1 U	**0.12 M**	**0.104**	**0.067**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.25 U	0.25 U	**10.3 D**	**0.23**	**0.9 D**	**0.34 D**	0.05 U	0.05 U	**0.28**	0.1 U	**0.41 M**	**0.506**	**0.077**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.31 D**	0.25 U		**0.79**	**0.26 D**	**0.39 D**	0.05 U	0.05 U	**0.4**	0.1 U	**0.66 M**	**1**	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	**0.141**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.25 U	0.25 U	**4.5 D**	**0.85**	**0.19 D**	**0.32 D**	0.05 U	0.05 U	**0.31**	0.1 U	**0.51 M**	**0.873**	**0.076**	0.05 U	0.05 U	0.05 U	0.05 U	**0.121**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13		0.25 U	**3.2 D**	**1.25**	**0.2 D**	**0.28 D**	0.05 U	0.05 U	**0.32**	0.1 U	**0.51 M**	**1.1**	**0.096**	0.05 U	0.05 U	0.05 U	0.05 U	**0.154**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.25 U	0.25 U	**1.6 D**	**0.55**	0.1 U	**0.15 D**	0.05 U	0.05 U	**0.16**	0.1 U	**0.26 M**	**0.555**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.061**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.25 U	0.25 U	**1 D**	**0.31**	0.1 U	0.1 U	0.05 U	0.05 U	**0.07**	0.1 U	**0.13 M**	**0.389**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.052**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.37 D**	0.25 U	**5.6 D**	**1.04**	**0.33 D**	**0.42 D**	0.05 U	0.05 U	**0.44**	0.1 U	**0.74 M**	**1.01**	**0.108**	0.05 U	0.05 U	0.05 U	0.05 U	**0.131**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.25 U	0.25 U	**1 D**	**0.13**	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	**0.147**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.62 D**	0.25 U	**11.4 D**	**1.19**	**1.33 D**	**0.82 D**	0.05 U	0.05 U	**0.91**	0.1 U	**1.46 M**	**1.85**	**0.219**	0.05 U	0.05 U	0.05 U	0.05 U	**0.179**
PAH	Fluorene	µg/g	0.19	62	62	**0.45 D**	0.25 U	**15.2 D**	**0.17**	**0.86 D**	**0.5 D**	0.05 U	0.05 U	**0.21**	0.1 U	**0.3 M**	**0.474**	**0.315**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.25 U	0.25 U	**1.7 D**	**0.53**	0.1 U	**0.13 D**	0.05 U	0.05 U	**0.15**	0.1 U	**0.24 M**	**0.586**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.074**
PAH	Naphthalene	µg/g	0.09	0.6	200	**4.95 D**	0.25 U	**65.5 D**	**0.1**	**0.13 D**	**0.12 D**	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	**0.755**	**1.33**	0.05 U	0.05 U	0.05 U	0.05 U	**0.054**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.94 D**	0.25 U	**37.7 D**	**1.16**	**4.95 D**	**1.72 D**	**0.08**	0.05 U	**1.21**	0.1 U	**1.79 M**	**2.06**	**0.525**	0.05 U	0.05 U	0.05 U	0.05 U	**0.088**
PAH	Pyrene	µg/g	1	78	2600		0.25 U	**16.6 D**	**1.28**	**1.62 D**	**1.1 D**	0.05 U	0.05 U	**1.26**	0.1 U	**2.07 M**	**2.04**	**0.34**	0.05 U	0.05 U	**0.05**	0.05 U	**0.164**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**313 D**	5 U	**25.5**	5 U	10 U	10 U	5 U	5 U	5 U	10 U	7.5 U	**409 D**	**67.2**	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	**300**	5 U	**16.5**	5 U	10 U	10 U	5 U	5 U	5 U	10 U	7.5 U	**405**	**66.2**	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**1810**	**37**	**1040**	10 U	20 U	20 U	10 U	10 U	**20**	**24 M**	**20 M**	**50**	**301**	10 U	10 U	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	**1810**	**37**	**978**	10 U	20 U	20 U	10 U	10 U	**20**	**24**	**20**	**49**	**300**	10 U	10 U	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**17600**	**280**	**1520**	**225**	**130 D**	**110 D**	50 U	**55**	**109**	**130 M**	**151 M**	**670**	**723**	50 U	**56**	50 U	50 U	**127**
PHC	F3-PAH	µg/g	240	300		**17600**	**280**	**1440**	**218**	**120**	**100**	50 U	**55**	**104**	**130**	**144**	**660**	**721**	50 U	**56**	50 U	50 U	**126**
PHC	F4 (C34-C50)	µg/g	120	2800		**6220**	**99**	**221**	**249**	100 U	100 U	50 U	50 U	50 U	100 U	75 U	**509**	**655**	50 U	**157**	50 U	50 U	**153**
PHC	F4G-SG	µg/g	120	2800																**710**			
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**25900**	**416**	**2810**	**474**	140 U	140 U	72 U	72 U	**129**	**160**	**170**	**1640**	**1750**	72 U	**213**	72 U	72 U	**280**
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	6.3 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.055 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	1.3 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.07 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.9 U	0.3 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH75-15	BH75-15	BH75-15	BH76-15	BH76-15	BH76-15	BH76-15	BH77-15	BH77-15	BH77-15	BH77-15	BH78-15	BH78-15	BH78-15	BH79-15	BH79-15	BH79-15	BH81-15
						Sample ID	S-11102463-101315-KMV-155	S-11102463-101315-KMV-156	S-11102463-101315-KMV-157	S-11102463-081715-TB-417	S-11102463-081715-TB-418	S-11102463-081715-TB-419	S-11102463-081715-TB-420	S-11102463-082615-KMV-144	S-11102463-082615-KMV-145	S-11102463-082615-KMV-146	S-11102463-082615-KMV-147	S-11102463-111015-TB-511	S-11102463-111015-TB-512	S-11102463-111015-TB-513	S-11102463-081715-TB-421	S-11102463-081715-TB-422	S-11102463-081715-TB-423	S-11102463-102715-TB-474
						Start Depth	0.76	3.04	6.85	1.52	3.81	3.81	6.85	3.05	6.1	9.91	6.1	0.76	1.52	3.81	1.52	2.28	6.85	0.76
						End Depth	1.37	3.65	7.46	2.13	4.41	4.41	7.46	3.66	6.71	10.52	6.71	1.37	2.13	4.41	2.13	2.89	7.46	1.37
						Date	13 Oct 2015	13 Oct 2015	13 Oct 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	10 Nov 2015	10 Nov 2015	10 Nov 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	27 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.085 U	0.085 U	0.042 U	0.042 U	0.042 U	0.085 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	1 U	1 U	0.75 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	**1.3 D**	**1.3 D**	0.5 U	0.5 U	0.5 U	1 U	1.5 U	**0.96 M**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.0781**	0.0068 U	**0.056**	0.0068 U	**0.02 D**	0.0002 U	**0.15**	0.0068 U	**0.1**	**0.12 M**	**0.06 M**	**0.589**	**0.202**	**0.0083**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	3.5 U	0.9 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.8 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	2 U	0.8 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.06 U	0.03 U	0.03 U	0.03 U	0.06 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**1.88**	**0.028**	**5.98**	0.018 U	**0.04 D**	0.036 U	0.018 U	0.018 U	0.036 U	0.036 U	0.027 U	**1.29**	**0.455**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	**19.3 D**	**3.04**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**1.53**	0.08 U	0.08 U	0.08 U	0.16 U	0.16 U	0.08 U	0.08 U	0.08 U	0.16 U	0.12 U	**0.207**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.06 U	0.03 U	0.03 U	0.03 U	0.06 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.018**	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.02 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U	0.05 U	0.1 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.04 U	0.02 U	0.02 U	0.02 U	0.04 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**4.12**	**0.06**	**1.73**	0.02 U	**0.17 D**	**0.17 D**	0.02 U	0.02 U	0.02 U	0.04 U	0.03 U	**0.243**	**0.058**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**5.4**	**0.073**	**1.21**	0.03 U	**0.21 D**	**0.13 D**	0.03 U	0.03 U	**0.05**	0.06 U	0.045 U	**1.6**	**0.273**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**9.52**	**0.133**	**2.94**	0.05 U	**0.38**	**0.3**	0.05 U	0.05 U	**0.05**	0.072 U	0.054 U	**1.84**	**0.331**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH81-15	BH81-15	BH81-15	BH83-15	BH83-15	BH83-15	BH84-15	BH84-15	BH84-15	BH84-15	BH85-15	BH85-15	BH85-15	BH85-15	BH86-15	BH86-15	BH86-15	BH87-15	BH87-15
					Sample ID	S-11102463-102715-TB-475	S-11102463-102715-TB-476	S-11102463-110215-TB-477	S-11102463-111115-TB-521	S-11102463-111115-TB-522	S-11102463-111115-TB-523	S-11102463-081415-TB-410	S-11102463-081415-TB-411	S-11102463-081415-TB-412	S-11102463-081415-TB-413	S-11102463-111115-TB-517	S-11102463-111115-TB-518	S-11102463-111115-TB-519	S-11102463-111115-TB-520	S-11102463-082015-LG-262	S-11102463-082015-LG-263	S-11102463-082015-LG-264	S-11102463-111015-TB-514	S-11102463-111015-TB-515
					Start Depth	2.28	2.28	3.81	0	1.52	3.04	0.76	0.76	1.52	6.09	0.76	1.52	6.09	6.09	3.04	6.09	8.38	0	2.28
					End Depth	2.89	2.89	4.41	0.6	2.13	3.65	1.37	1.37	2.13	6.7	1.37	2.13	6.7	6.7	3.65	6.7	8.99	0.6	2.89
					Date	27 Oct 2015	27 Oct 2015	02 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	10 Nov 2015	10 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**15.8**	**18.7**	**14.6**	**18.5**	**12.7**	**15.5**	**21.5**	**31.9**	**14.5**	**65.3**	**29.2**	**20.4**	**12.7**	**13.9**	**9.38**	**38.5**	**35.7**	**5.28**	**32**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.78**	**7.78**	**7.72**	**7.71**	**8.1**	**7.93**	**7.23**	**7.51**	**7.52**	**6.91**	**7.44**	**7.56**	**7.91**	**8.07**	**7.59**	**7.18**	**7.21**	**7.71**	**7.34**
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**15.8**	**18.7**	**14.6**	**18.5**	**12.7**	**15.5**					**29.2**	**20.4**	**12.7**	**13.9**				**5.28**	**32**
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.7**	1 U	1 U	1 U	**1.4**
INORGANIC	Arsenic	µg/g	18	18		**1.6**	**1.4**	**1**	**1**	**1.1**	1 U	**2.6**	**1.3**	**2.2**	**2.8**	1 U	**1.3**	**1.2**	**1.1**	**11.1**	**5.4**	**1.3**	**1.9**	**3.3**
INORGANIC	Barium	µg/g	220	390		**17**	**10.1**	**7.6**	**32.3**	**13.2**	**7.6**	**57.9**	**18.1**	**17.7**	**118**	**17.3**	**13.8**	**12.5**	**12.7**	**144**	**105**	**83.7**	**16.9**	**171**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.69**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.59**	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	5 U	5 U	**9.6**	**5.2**	5 U	**9.5**	5 U	5 U	5 U	5 U	**8.6**	**10.2**	**5.9**	5 U	**7.5**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.48**	**0.38**	**0.28**	**0.56**	0.1 U	0.1 U	**1.64**	**0.28**	**0.24**	**0.39**	**0.17**	**0.1**	0.1 U	0.1 U	**1.03**	**1.63**	**0.47**	**0.16**	**1.38**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**7.7**	**5.6**	**4.8**	**5.1**	**5.2**	**3.4**	**14.8**	**5.4**	**6.2**	**31.8**	**5.5**	**4.8**	**7.7**	**8.2**	**16.7**	**27.5**	**15.6**	**7.3**	**18.7**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**2.1**	**1.8**	**1.5**	**2**	**1.9**	**1.6**	**5.3**	**2.2**	**2.2**	**10.5**	**1.6**	**1.9**	**2.6**	**2.7**	**6.5**	**8.5**	**5.2**	**3**	**5.1**
INORGANIC	Copper	µg/g	92	140		**9.8**	**5.4**	**3.4**	**2.8**	**2.3**	**2.8**	**11.5**	**3.8**	**7**	**23.1**	**1.5**	**4.6**	**6.8**	**7**	**53.8**	**24**	**10.8**	**5.5**	**21.4**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.334**	**0.304**	**0.304**	**0.22**	**0.144**	**0.103**	**0.28**	**0.16**	**0.24**	**0.34**	**0.131**	**0.127**	**0.119**	**0.101**	**0.29**	**0.52**	**0.33**	**0.178**	**0.344**
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**14**	**6.5**	**2.4**	**2.2**	**5**	**2.3**	**9.5**	**4.1**	**8.6**	**10**	**2.4**	**15.8**	**4.3**	**3.7**	**127**	**12.5**	**4.8**	**25.3**	**102**
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0517**	**0.0179**	0.005 U	**0.0057**	**0.0311**	**0.0081**	**0.04**	**0.0075**	**0.02**	**0.02**	0.005 U	**0.0259**	**0.0054**	0.005 U	**0.13**	**0.04**	**0.01**	**0.0402**	**1.72 D**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**5.4**	**4**	**3.5**	**3.5**	**3**	**2.8**	**11.9**	**4.5**	**4.9**	**24.9**	**3.3**	**3.6**	**6.2**	**6.6**	**14.7**	**21.8**	**11.2**	**5.5**	**11.7**
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	0.2 U	0.2 U	0.2 U	**0.29**
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.05**	**0.86**		**0.11**	0.1 U	0.1 U	**1.03**	**0.67**	**1.23**	**0.61**		0.1 U	**0.11**		**0.14**	**0.46**	**0.26**	**0.93**	**0.42**
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**8.9**	**9.3**	**8**	**10.2**	**11.5**	**5.2**	**21.1**	**9.2**	**9.6**	**40.5**	**6.9**	**7.9**	**8.6**	**9.3**	**19.1**	**36.1**	**22.6**	**15.2**	**21.4**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**0.07**	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**36.3**	**16.5**	**12.4**	**9.4**	**11.8**	**7.9**	**41.2**	**12.2**	**21.6**	**61.3**	**7.8**	**21.1**	**27**	**25.1**	**99.4**	**50.9**	**27.2**	**36.1**	**60.2**
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH81-15	BH81-15	BH81-15	BH83-15	BH83-15	BH83-15	BH84-15	BH84-15	BH84-15	BH84-15	BH85-15	BH85-15	BH85-15	BH85-15	BH86-15	BH86-15	BH86-15	BH87-15	BH87-15
					Sample ID	S-11102463-102715-TB-475	S-11102463-102715-TB-476	S-11102463-110215-TB-477	S-11102463-111115-TB-521	S-11102463-111115-TB-522	S-11102463-111115-TB-523	S-11102463-081415-TB-410	S-11102463-081415-TB-411	S-11102463-081415-TB-412	S-11102463-081415-TB-413	S-11102463-111115-TB-517	S-11102463-111115-TB-518	S-11102463-111115-TB-519	S-11102463-111115-TB-520	S-11102463-082015-LG-262	S-11102463-082015-LG-263	S-11102463-082015-LG-264	S-11102463-111015-TB-514	S-11102463-111015-TB-515
					Start Depth	2.28	2.28	3.81	0	1.52	3.04	0.76	0.76	1.52	6.09	0.76	1.52	6.09	6.09	3.04	6.09	8.38	0	2.28
					End Depth	2.89	2.89	4.41	0.6	2.13	3.65	1.37	1.37	2.13	6.7	1.37	2.13	6.7	6.7	3.65	6.7	8.99	0.6	2.89
					Date	27 Oct 2015	27 Oct 2015	02 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	10 Nov 2015	10 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**2.75**	**1.24**	0.042 U	0.042 U	0.042 U	**0.221**	0.042 U	0.042 U	0.042 U	0.085 U	**8.18**	**0.286**	**0.102**	**0.084**	**0.44**	**1.92**	0.042 U	0.042 U	**0.176**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**1.19**	**0.535**	0.03 U	0.03 U	0.03 U	**0.089**	0.03 U	0.03 U	0.03 U	0.06 U	**6.52**	**0.286**	**0.042**	**0.034**	**0.2**	**1.11**	0.03 U	0.03 U	**0.074**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**1.56**	**0.705**	0.03 U	0.03 U	0.03 U	**0.132**	0.03 U	0.03 U	0.03 U	0.06 U	**1.67**	0.03 U	**0.06**	**0.05**	**0.24**	**0.81**	0.03 U	0.03 U	**0.102**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.054**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	**0.866**	0.05 U	0.05 U	0.05 U	**0.53**	**0.39**	0.05 U	0.05 U	**0.122**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.1 U	**0.693**	0.05 U	0.05 U	0.05 U	**0.34**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	**0.616**	0.05 U	0.05 U	0.05 U	**5.28**	0.05 U	0.05 U	0.05 U	**0.115**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.051**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.12 U	0.05 U	**0.05**	0.1 U		0.05 U	0.05 U	0.05 U	**46.4 D**	0.05 U	0.05 U	0.05 U	**0.205**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.21**	0.05 U	**0.05**	0.1 U	**0.28**	0.05 U	0.05 U	0.05 U	**44.3 D**	0.05 U	0.05 U	0.05 U	**0.166**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.054**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.21**	0.05 U	**0.05**	0.1 U	**0.24**	0.05 U	0.05 U	0.05 U	**57.1 D**	0.05 U	0.05 U	**0.053**	**0.206**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.22**	0.05 U	0.05 U	0.1 U	**0.094**	0.05 U	0.05 U	0.05 U	**26.8 D**	0.05 U	0.05 U	0.05 U	**0.082**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.1 U	**0.084**	0.05 U	0.05 U	0.05 U	**20.5 D**	0.05 U	0.05 U	0.05 U	**0.061**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**	0.05 U	**0.06**	0.1 U	**0.406**	0.05 U	0.05 U	0.05 U	**49.3 D**	0.05 U	0.05 U	0.05 U	**0.21**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**8.17**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.094**	0.05 U	0.05 U	0.05 U	0.05 U	**0.051**	**0.12**	0.05 U	**0.13**	0.1 U	**0.75**	**0.059**	0.05 U	0.05 U	**78.6 D**	**0.07**	0.05 U	**0.057**	**0.381**
PAH	Fluorene	µg/g	0.19	62	62	**0.087**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	**1.27**	0.05 U	0.05 U	0.05 U	**0.31**	**0.05**	0.05 U	0.05 U	**0.092**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	0.1 U	**0.097**	0.05 U	0.05 U	0.05 U	**30.8 D**	0.05 U	0.05 U	0.05 U	**0.101**
PAH	Naphthalene	µg/g	0.09	0.6	200	**1.01**	**0.481**	0.05 U	0.05 U	0.05 U	**0.093**	0.05 U	0.05 U	0.05 U	0.1 U	**2.75**	0.05 U	**0.128**	**0.097**	**0.18**	**4.48**	0.05 U	0.05 U	**0.163**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.265**	**0.132**	0.05 U	0.05 U	0.05 U	**0.111**	**0.06**	0.05 U	**0.12**	0.1 U	**2.59**	**0.056**	**0.062**	**0.057**	**25.1 D**	**0.08**	0.05 U	0.05 U	**0.434**
PAH	Pyrene	µg/g	1	78	2600	**0.108**	0.05 U	0.05 U	0.05 U	0.05 U	**0.068**	**0.16**	0.05 U	**0.11**	0.1 U	**1.19**	**0.086**	0.05 U	0.05 U	**71 D**	**0.07**	0.05 U	**0.057**	**0.404**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	**72.1**	**391 D**	**12**	5 U	5 U	5 U	5 U	5 U	5 U	10 U	**1070 D**	**8.4**	5 U	5 U	**7.4**	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	**70.6**	**382**	**11.8**	5 U	5 U	5 U	5 U	5 U	5 U	10 U	**1070**	**8.3**	5 U	5 U	**6**	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**187**	**176**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	**665**	**17**	10 U	10 U	**17**	**16**	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	**186**	**176**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	**662**	**17**	10 U	10 U	**16**	**12**	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**130**	**210**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U	**2350**	**115**	50 U	50 U	**1280**	50 U	**54**	50 U	**328**
PHC	F3-PAH	µg/g	240	300		**130**	**210**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U	**2350**	**115**	50 U	50 U	**899**	50 U	**54**	50 U	**326**
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	**115**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U	**964**	50 U	50 U	50 U	**355**	50 U	50 U	50 U	**60**
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**390**	**892**	72 U	72 U	72 U	72 U	72 U	72 U	72 U	140 U	**5060**	**141**	72 U	72 U	**1660**	72 U	72 U	72 U	**389**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.16 U	3 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.5 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	5.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	BH81-15	BH81-15	BH81-15	BH83-15	BH83-15	BH83-15	BH84-15	BH84-15	BH84-15	BH84-15	BH85-15	BH85-15	BH85-15	BH85-15	BH86-15	BH86-15	BH86-15	BH87-15	BH87-15
						Sample ID	S-11102463-102715-TB-475	S-11102463-102715-TB-476	S-11102463-110215-TB-477	S-11102463-111115-TB-521	S-11102463-111115-TB-522	S-11102463-111115-TB-523	S-11102463-081415-TB-410	S-11102463-081415-TB-411	S-11102463-081415-TB-412	S-11102463-081415-TB-413	S-11102463-111115-TB-517	S-11102463-111115-TB-518	S-11102463-111115-TB-519	S-11102463-111115-TB-520	S-11102463-082015-LG-262	S-11102463-082015-LG-263	S-11102463-082015-LG-264	S-11102463-111015-TB-514	S-11102463-111015-TB-515
						Start Depth	2.28	2.28	3.81	0	1.52	3.04	0.76	0.76	1.52	6.09	0.76	1.52	6.09	6.09	3.04	6.09	8.38	0	2.28
						End Depth	2.89	2.89	4.41	0.6	2.13	3.65	1.37	1.37	2.13	6.7	1.37	2.13	6.7	6.7	3.65	6.7	8.99	0.6	2.89
						Date	27 Oct 2015	27 Oct 2015	02 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	11 Nov 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	10 Nov 2015	10 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.34 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.085 U	0.3 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	1 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.0167**	0.054 U	**0.0108**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.014 U	0.068 U	0.0068 U	0.0068 U	0.0068 U	**0.03**	0.014 U	0.0068 U	**0.0209**	0.0068 U	
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.5 U	7.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	10 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.16 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.8 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.3 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U	
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.488**	**2.58 D**	**0.047**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.036 U	0.054 U	**0.022**	0.018 U	0.018 U	**0.16**	**0.28**	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.615**	**3.08 D**	**0.054**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	**1.57 D**	**0.12**	0.05 U	0.05 U	**0.1**	0.05 U	0.05 U		0.05 U	
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.64 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.34**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.08 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.16 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.59 D**	0.2 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.119**	**0.68 D**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	**2.25**	**0.041**	0.02 U	0.02 U	**0.42**	**0.25**	0.02 U	**0.059**	0.02 U	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.941**	**5.62 D**	**0.119**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	**0.247**	**0.069**	0.03 U	0.03 U	**0.37**	**0.33**	0.03 U	**0.062**	0.03 U	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**1.06**	**6.31**	**0.119**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.072 U	**2.49**	**0.109**	0.05 U	0.05 U	**0.8**	**0.58**	0.05 U	**0.121**	0.05 U	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH87-15	BH88-15	BH88-15	BH88-15	BH88-15	BH89-15	BH89-15	BH89-15	BH90-15	BH90-15	BH90-15	BH91-15	BH91-15	BH91-15	BH91-15	BH92-15	BH92-15	BH92-15	BH93-15
					Sample ID	S-11102463-111015-TB-516	S-11102463-082115-LG-268	S-11102463-082115-LG-269	S-11102463-082115-LG-270	S-11102463-082115-LG-271	S-11102463-081815-LG-256	S-11102463-081815-LG-257	S-11102463-081815-LG-258	S-11102463-081915-LG-259	S-11102463-081915-LG-260	S-11102463-081915-LG-261	S-11102463-082415-LG-274	S-11102463-082415-LG-275	S-11102463-082415-LG-276	S-11102463-082415-LG-280	S-11102463-082615-KMV-151	S-11102463-082615-KMV-152	S-11102463-082615-KMV-153	S-11102463-082015-LG-265
					Start Depth	6.09	3.81	6.86	9.91	9.91	3.04	4.57	9.14	3.04	6.09	9.14	3.81	6.86	9.91	0.76	1.52	3.05	6.1	3.04
					End Depth	6.7	4.42	7.47	10.52	10.52	3.65	5.18	9.75	3.65	6.7	9.75	4.42	7.47	7.47	1.37	2.13	3.66	6.71	3.65
					Date	10 Nov 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**19.1**	**10**	**25.3**	**14.2**	**14.5**	**7.79**	**18.8**	**17.3**	**6.5**	**39.4**	**23.6**	**3.71**	**36.1**	**21.1**	**14.3**	**15.9**	**48.2**	**19.5**	**9.29**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.56**	**7.76**	**7**	**7.93**	**7.81**	**7.9**	**7.66**	**7.55**	**9.06**	**7.08**	**7.18**	**7.83**	**7.02**	**7.75**	**7.44**	**7.73**	**7.18**	**7.51**	**8.01**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**19.1**																	
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	**1.2**	**1.1**	1 U	**1**	**1**	**2.3**	1 U	**8.8**	**10.2**	1 U	1 U	1 U	1 U	**2.9**	**1.4**	**2.7**	1 U	**2.9**
INORGANIC	Barium	µg/g	220	390		**9.7**	**21.3**	**66.5**	**20.1**	**21.6**	**10.4**	**19.8**	**15.1**	**165**	**133**	**27.2**	**13.3**	**49.1**	**13**	**142**	**11.6**	**88.8**	**19.9**	**28.5**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.54**	**0.79**	0.5 U	0.5 U	0.5 U	0.5 U	**0.7**	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	**5.2**	5 U	5 U	5 U	**5.6**	5 U	**18.4**	**14.7**	5 U	5 U	5 U	5 U	**12**	5 U	**6.2**	5 U	**8.8**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	**0.3**	**0.33**	0.1 U	0.1 U	**0.25**	**0.8**	**0.15**	**1.29**	**1.42**	**0.39**	**0.2**	**0.28**	0.1 U	**0.57**	0.1 U	**0.94**	**0.23**	**1.22**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.62**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**4**	**5.6**	**12.8**	**8.2**	**8.4**	**5.4**	**10.1**	**5.5**	**23.6**	**38.5**	**6.9**	**4**	**9.6**	**5.9**	**38**	**4.6**	**18.2**	**5.3**	**12.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.8**	**2.5**	**4.1**	**3.1**	**3.1**	**1.6**	**3.8**	**2.1**	**6.1**	**11.1**	**2.4**	**1.6**	**3.2**	**1.7**	**9.7**	**1.7**	**5.2**	**2.1**	**6.3**
INORGANIC	Copper	µg/g	92	140		**3.2**	**3.6**	**8**	**5**	**4.7**	**2.9**	**5.7**	**1.7**	**68.9**	**31.6**	**3.7**	**4.9**	**5.9**	**1.4**	**20.5**	**2.7**	**12.8**	**2.1**	**12**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.12**	**0.42**	**0.34**	**0.11**	**0.12**	**0.17**	**0.3**	**0.18**	**0.75**	**0.57**	**0.22**	**0.14**	**0.28**	**0.17**	**0.41**	**0.15**	**0.44 M**	**0.16**	**0.53**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**5.2**	**9.6**	**3.7**	**3.8**	**4.1**	**2.4**	**4.2**	**1.5**	**261**	**22.8**	**2.2**	**7**	**2.8**	**1.5**	**9.8**	**9.4**	**6.5**	**1.9**	**13.6**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.108**	**0.01**	**0.01**	**0.0062**	**0.0079**	0.005 U	**0.01**	0.005 U	**0.33**	**0.07**	**0.0063**	**0.01**	**0.0082**	0.005 U	**0.01**	0.005 U	**0.02**	0.005 U	**0.02**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**4.1**	**5**	**8.6**	**7.7**	**7.4**	**3.7**	**6.7**	**3.5**	**17.6**	**27.8**	**4.6**	**3.5**	**6.5**	**3.3**	**24.9**	**3.7**	**12.8**	**4**	**13.3**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**1.02**	**0.35**			**0.6**	**0.91**	**1.7**	**0.47**	**1.13**	**0.25**	**0.16**	**0.45**	**0.31**	**1.25**		**1.63**		**3.72**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**5.5**	**9.6**	**19.4**	**9.5**	**10**	**16**	**19.5**	**13.2**	**24.5**	**44.8**	**12.2**	**7.5**	**16**	**9.4**	**40.9**	**7**	**23**	**8.9**	**21.1**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**16.7**	**14**	**22.1**	**16.8**	**17.1**	**10.9**	**16.8**	**9.9**	**410**	**79.1**	**11.5**	**14.2**	**16.9**	**7.7**	**50.2**	**11.5**	**30.4**	**9.7**	**48.2**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH87-15	BH88-15	BH88-15	BH88-15	BH88-15	BH89-15	BH89-15	BH89-15	BH90-15	BH90-15	BH90-15	BH91-15	BH91-15	BH91-15	BH91-15	BH92-15	BH92-15	BH92-15	BH93-15
					Sample ID	S-11102463-111015-TB-516	S-11102463-082115-LG-268	S-11102463-082115-LG-269	S-11102463-082115-LG-270	S-11102463-082115-LG-271	S-11102463-081815-LG-256	S-11102463-081815-LG-257	S-11102463-081815-LG-258	S-11102463-081915-LG-259	S-11102463-081915-LG-260	S-11102463-081915-LG-261	S-11102463-082415-LG-274	S-11102463-082415-LG-275	S-11102463-082415-LG-276	S-11102463-082415-LG-280	S-11102463-082615-KMV-151	S-11102463-082615-KMV-152	S-11102463-082615-KMV-153	S-11102463-082015-LG-265
					Start Depth	6.09	3.81	6.86	9.91	9.91	3.04	4.57	9.14	3.04	6.09	9.14	3.81	6.86	9.91	0.76	1.52	3.05	6.1	3.04
					End Depth	6.7	4.42	7.47	10.52	10.52	3.65	5.18	9.75	3.65	6.7	9.75	4.42	7.47	7.47	1.37	2.13	3.66	6.71	3.65
					Date	10 Nov 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**13.4**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.64**	**127**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.13**	0.042 U	0.042 U	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**5.47**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.29**	**53.3 D**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.08**	0.03 U	0.03 U	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**7.9**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.35**	**74 D**	**0.03**	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	0.03 U	0.03 U	**0.03**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**6**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.24**	**98.4 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.52**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.39**	**11.3**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**2.42**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.75**	**77.1 D**	0.05 U	**0.29**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2.76**	**50.7 D**	0.05 U	**1.81**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.981**	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**3.22**	**36.6 D**	0.05 U	**1.64**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.754**	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**3.71**	**26 D**	0.05 U	**2.01**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.305**	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.55**	**8.65**	0.05 U	**0.99**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.213**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.06**	**6.19**	0.05 U	**0.71**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**1.35**	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**3.02**	**50.8 D**	0.05 U	**1.79**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.14**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.45**	**2.48**	0.05 U	**0.25**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**2.54**	**0.18**	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	**4.88**	**88.1 D**	0.05 U	**3.16**	0.05 U	0.05 U	**0.05**	**0.05**	**0.05**	0.05 U	**0.32**
PAH	Fluorene	µg/g	0.19	62	62	**3.12**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.38**	**65.6 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.345**	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.62**	**8.13**	0.05 U	**1.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.1**
PAH	Naphthalene	µg/g	0.09	0.6	200	**14.5 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.34**	**12.2**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**7.73**	**0.14**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2.17**	**231 D**	0.05 U	**1.22**	0.05 U	0.05 U	0.05 U	**0.1**	**0.06**	0.05 U	**0.23**
PAH	Pyrene	µg/g	1	78	2600	**3.57**	**0.16**	0.05 U	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	**5.16**	**126 D**	0.05 U	**2.8**	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.36**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**34.8**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	**16.9**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**114**	10 U	10 U	10 U	10 U	**14**	10 U	10 U	**57**	**135**	10 U	10 U	10 U	10 U	10 U	**71**	10 U	10 U	**11**
PHC	F2-Naphth	µg/g	10	98	230	**99**	10 U	10 U	10 U	10 U	**14**	10 U	10 U	**57**	**123**	10 U	10 U	10 U	10 U	10 U	**71**	10 U	10 U	**11**
PHC	F3 (C16-C34)	µg/g	240	300		**215**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**2340**	**277**	50 U	**89**	**51**	50 U	50 U	**166**	**87**	50 U	**109**
PHC	F3-PAH	µg/g	240	300		**198**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**2320**	50 U	50 U	**74**	**51**	50 U	50 U	**166**	**87**	50 U	**108**
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**1610**	**60**	50 U	50 U	50 U	50 U	50 U	**129**	50 U	50 U	**255**
PHC	F4G-SG	µg/g	120	2800										**2120**										**730**
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U
PHC	Total Hydrocarbons (C6-C50)	µg/g				**364**	72 U	72 U	72 U	72 U	72 U	72 U	72 U	**4010**	**473**	72 U	**89**	72 U	72 U	72 U	**367**	**87**	72 U	**375**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH87-15	BH88-15	BH88-15	BH88-15	BH88-15	BH89-15	BH89-15	BH89-15	BH90-15	BH90-15	BH90-15	BH91-15	BH91-15	BH91-15	BH91-15	BH92-15	BH92-15	BH92-15	BH93-15
					Sample ID	S-11102463-111015-TB-516	S-11102463-082115-LG-268	S-11102463-082115-LG-269	S-11102463-082115-LG-270	S-11102463-082115-LG-271	S-11102463-081815-LG-256	S-11102463-081815-LG-257	S-11102463-081815-LG-258	S-11102463-081915-LG-259	S-11102463-081915-LG-260	S-11102463-081915-LG-261	S-11102463-082415-LG-274	S-11102463-082415-LG-275	S-11102463-082415-LG-276	S-11102463-082415-LG-280	S-11102463-082615-KMV-151	S-11102463-082615-KMV-152	S-11102463-082615-KMV-153	S-11102463-082015-LG-265
					Start Depth	6.09	3.81	6.86	9.91	9.91	3.04	4.57	9.14	3.04	6.09	9.14	3.81	6.86	9.91	0.76	1.52	3.05	6.1	3.04
					End Depth	6.7	4.42	7.47	10.52	10.52	3.65	5.18	9.75	3.65	6.7	9.75	4.42	7.47	7.47	1.37	2.13	3.66	6.71	3.65
					Date	10 Nov 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**3.04**	0.0068 U	**0.12**	0.0068 U	0.0068 U	0.0068 U	**0.0094**	0.0068 U	**0.19**	0.0068 U	0.0068 U	0.0068 U	**0.12**	**0.01**	0.0068 U	**0.0095**	0.0068 U	**0.01**	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.1**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**8.32**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.05**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.14**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.15**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**2.92**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.02 U	**0.07**	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**3.54**	0.03 U	**0.12**	**0.04**	0.03 U	0.03 U	0.03 U	0.03 U	**0.11**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**6.46**	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH93-15	BH93-15	BH94-15	BH94-15	BH94-15	BH94-15	BH95-15	BH95-15	BH95-15	BH97-15	BH97-15	BH97-15	BH97-15	BH98-15	BH98-15	BH98-15	BH98-15	BH99-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	082015-LG-266	082015-LG-267	082415-LG-277	082415-LG-278	082415-LG-279	082415-LG-281	081815-TB-424	081815-TB-425	081815-TB-426	082515-KMV-139	082515-KMV-140	082515-KMV-141	082515-KMV-142	082715-KMV-154	082715-KMV-155	082715-KMV-156	082715-KMV-157	082015-TB-438
					Start Depth	6.09	8.38	0.76	3.05	6.86	3.05	2.28	3.81	6.09	4.57	6.86	6.86	10.67	2.29	2.29	3.05	6.1	1.52
					End Depth	6.7	8.99	1.37	3.66	7.47	3.66	2.89	4.41	6.7	5.18	7.47	7.47	11.28	2.9	2.9	3.66	6.71	2.13
					Date	20 Aug 2015	20 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**41.5**	**29**	**14**	**45.6**	**17.1**	**17.8**	**21.1**	**20.6**	**65.9**	**23.6**	**46**	**29.6**	**18.9**	**35.2**	**35**	**20.7**	**44.4**	**6**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.08**	**7.39**	**7.83**	**7.55**	**7.39**	**7.29**	**7.68**	**7.1**	**6.98**	**7.19**	**7.02**	**7.11**	**7.72**	**7.18**	**7.23**	**7.4**	**7.16**	**7.9**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%																				
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**4.9**	**1.2**	**4**	**2**	1 U	**1.8**	**1.9**	**2.1**	**2.4**	**1.9**	**1.2**	**1.4**	1 U	**3.2**	**3.2**	**1.6**	**1.7**	1 U
INORGANIC	Barium	µg/g	220	390		**127**	**50.6**	**86.7**	**54.2**	**21**	**39.5**	**27.8**	**36**	**87.5**	**27**	**68.2**	**50.7**	**10**	**90**	**87.8**	**34.6**	**114**	**9.3**
INORGANIC	Beryllium	µg/g	2.5	4		**0.66**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.57**	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**8.6**	5 U	**10.2**	**5.7**	5 U	5 U	**6.7**	5 U	**8.7**	**5.1**	**5.5**	5 U	5 U	**8.7**	**9.2**	5 U	**6.6**	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.66**	**0.52**	**0.88**	**0.46**	0.1 U	**0.55**	**1.46**	**0.88**	**0.86**	**0.73**	**0.36**	**0.45**	0.1 U	**1.24**	**1.28**	**0.68**	**0.65**	**0.31**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**31.6**	**10.1**	**18.9**	**16.7**	**6.8**	**13.8**	**10.9**	**8.6**	**16.2**	**10.6**	**16.9**	**12.4**	**4.7**	**22.8**	**26.1**	**12.5**	**18.6**	**3.6**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**9.4**	**3.4**	**7.3**	**5.5**	**2.3**	**5.1**	**4.2**	**3.3**	**5.2**	**3.7**	**5.2**	**4**	**1.5**	**7.4**	**8.6**	**4.5**	**6.6**	**1.6**
INORGANIC	Copper	µg/g	92	140		**27**	**6.6**	**29.7**	**11.5**	**2.3**	**9.7**	**7.3**	**5.3**	**13.6**	**8.2**	**11.3**	**8.7**	**2.4**	**18.2**	**20.8**	**7.5**	**13.9**	**3.6**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.77**	**0.45**	**0.74**	**0.71**	**0.22**	**0.55**	**0.36**	**0.4**	**0.31**	**0.3**	**0.5**	**0.49**	**0.12**	**0.3**	**0.33**	**0.23**	**0.29**	**0.15**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**16.2**	**3.2**	**90.4**	**6.2**	**2.1**	**10.3**	**12**	**4.6**	**8.2**	**8.8**	**4.7**	**5.1**	**1.9**	**15.6**	**14.1**	**4.7**	**5.4**	**3**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.07**	**0.01**	**0.15**	**0.02**	0.005 U	**0.03**	**0.02**	**0.01**	**0.01**	**0.02**	**0.01**	**0.01**	0.005 U	**0.11**	**0.1**	**0.02**	**0.01**	**0.0062**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**23.2**	**7**	**22**	**12.6**	**5.6**	**11.6**	**8.6**	**6.7**	**13.1**	**8.7**	**11.6**	**8.4**	**3.1**	**16.8**	**19.9**	**9.3**	**14.3**	**3.4**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.01**	**0.5**	**2.11**	**2.27**	**0.97**	**2.77**	**1.1**	**2.49**	**0.85**	**1.26**	**0.66**	**0.67**		**0.91**	**1.03**	**0.71**	**0.13**	**0.44**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**36.6**	**15.7**	**25.4**	**22.8**	**11.4**	**19.9**	**18**	**13.4**	**23.2**	**13.8**	**24.3**	**19.5**	**5.9**	**28.2**	**31.9**	**17.7**	**26.9**	**6.5**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**64.3**	**18.4**	**91**	**32.2**	**11.7**	**28.9**	**21.2**	**18.4**	**31.6**	**28.2**	**29.7**	**23.3**	**8.3**	**50.1**	**52.5**	**21.7**	**35.6**	**17.5**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH93-15	BH93-15	BH94-15	BH94-15	BH94-15	BH94-15	BH95-15	BH95-15	BH95-15	BH97-15	BH97-15	BH97-15	BH97-15	BH98-15	BH98-15	BH98-15	BH98-15	BH99-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	082015-LG-266	082015-LG-267	082415-LG-277	082415-LG-278	082415-LG-279	082415-LG-281	081815-TB-424	081815-TB-425	081815-TB-426	082515-KMV-139	082515-KMV-140	082515-KMV-141	082515-KMV-142	082715-KMV-154	082715-KMV-155	082715-KMV-156	082715-KMV-157	082015-TB-438
					Start Depth	6.09	8.38	0.76	3.05	6.86	3.05	2.28	3.81	6.09	4.57	6.86	6.86	10.67	2.29	2.29	3.05	6.1	1.52
					End Depth	6.7	8.99	1.37	3.66	7.47	3.66	2.89	4.41	6.7	5.18	7.47	7.47	11.28	2.9	2.9	3.66	6.71	2.13
					Date	20 Aug 2015	20 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.08**	0.042 U	**0.24**	0.042 U	0.042 U	0.042 U	**0.19**	**0.17**	0.085 U	**14.8**	0.042 U	0.042 U	0.042 U	**5.11**	**16.2**	**2.48**	0.042 U	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.03**	0.03 U	**0.11**	0.03 U	0.03 U	0.03 U	**0.08**	**0.08**	0.06 U	**14.2**	0.03 U	0.03 U	0.03 U	**5.11**	**16.2**	**2.48**	0.03 U	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.04**	0.03 U	**0.13**	0.03 U	0.03 U	0.03 U	**0.11**	**0.09**	0.06 U	**0.54**	0.03 U	0.03 U	0.03 U	0.16 U	0.23 U	0.03 U	0.03 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.36**	0.05 U	**0.29**	**0.09**	0.05 U	**0.12**	**0.06**	**0.06**	0.1 U	**0.99**	0.05 U	0.05 U	0.05 U	**0.66**	**1.59**	**0.27**	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.06**	0.05 U	**0.22**	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	**0.2**	0.05 U	0.05 U	0.05 U	**0.17**	**0.43**	**0.05**	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.32**	0.05 U	**0.75**	**0.07**	0.05 U	**0.14**	**0.05**	0.05 U	0.1 U	**0.35**	0.05 U	0.05 U	0.05 U	**0.47**	**0.82**	**0.09**	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.25**	0.05 U	**1.99**	**0.15**	0.05 U	**0.31**	**0.05**	**0.19**	0.1 U	**0.57**	0.05 U	0.05 U	0.05 U	**0.56**	**0.89**	**0.07**	0.05 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.19**	0.05 U	**1.91**	**0.18**	0.05 U	**0.27**	0.05 U	**0.07**	0.1 U	**0.28**	0.05 U	0.05 U	0.05 U	**0.42**	**0.68**	0.05 U	0.05 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.19**	0.05 U	**2.1**	**0.15**	0.05 U	**0.31**	0.05 U	**0.06**	0.1 U	**0.25**	0.05 U	0.05 U	0.05 U	**0.43**	**0.67**	**0.05**	0.05 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.1**	0.05 U	**1.09**	**0.1**	0.05 U	**0.15**	0.05 U	0.05 U	0.1 U	**0.18**	0.05 U	0.05 U	0.05 U	**0.24**	**0.39**	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.06**	0.05 U	**0.79**	**0.05**	0.05 U	**0.1**	0.05 U	0.05 U	0.1 U	**0.06**	0.05 U	0.05 U	0.05 U	**0.12**	**0.21**	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.28**	0.05 U	**1.89**	**0.18**	0.05 U	**0.31**	**0.08**	**0.18**	0.1 U	**0.91**	0.05 U	0.05 U	0.05 U	**0.66**	**0.99**	**0.09**	0.05 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	**0.29**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	**0.07**	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.61**	0.05 U	**4.12**	**0.3**	0.05 U	**0.7**	**0.06**	**0.25**	0.1 U	**0.77**	0.05 U	0.05 U	0.05 U	**1.1**	**1.65**	**0.13**	0.05 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	**0.3**	0.05 U	**0.28**	**0.09**	0.05 U	**0.1**	**0.11**	0.05 U	0.1 U	**1.27**	0.05 U	0.05 U	0.05 U	**0.57**	**1.55**		0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.1**	0.05 U	**1.16**	**0.09**	0.05 U	**0.16**	0.05 U	0.05 U	0.1 U	**0.1**	0.05 U	0.05 U	0.05 U	**0.24**	**0.34**	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.05**	0.05 U	**0.15**	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.1 U	**1.31**	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**1.28**	0.05 U	**2.64**	**0.3**	0.05 U	**0.61**	**0.05**	**0.19**	0.1 U	**3.17**	0.05 U	0.05 U	0.05 U	**1.91**	**4.54**	**0.62**	0.05 U	0.05 U
PAH	Pyrene	µg/g	1	78	2600	**0.81**	0.05 U	**3.68**	**0.42**	0.05 U	**0.63**	**0.16**	**0.4**	0.1 U	**2.73**	0.05 U	0.05 U	0.05 U	**1.68**	**2.51**	**0.23**	0.05 U	0.05 U
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	**2350 I**	5 U	5 U	**13.6**	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	**2340**	5 U	5 U	**13.5**	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**21**	10 U	**43**	10 U	10 U	10 U	**211**	10 U	20 U	**3560**	10 U	10 U	**11**	**4290**	**8910**	**445**	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	**21**	10 U	**43**	10 U	10 U	10 U	**210**	10 U	20 U	**3560**	10 U	10 U	**11**	**4290**	**8910**	**445**	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**209**	**52**	**234**	**91**	50 U	50 U	**277**	**59**	100 U	**4170**	**51**	**59**	50 U	**3050**	**6670**	**495**	50 U	50 U
PHC	F3-PAH	µg/g	240	300		**205**	**52**	**215**	**90**	50 U	50 U	**277**	**58**	100 U	**4160**	**51**	**59**	50 U	**3040**	**6660**	**494**	50 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		**63**	50 U	**170**	**51**	50 U	50 U	**118**	50 U	100 U	**752**	50 U	50 U	50 U	**110**	**220**	50 U	50 U	50 U
PHC	F4G-SG	µg/g	120	2800				**690**															
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	**No**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**292**	72 U	**447**	**143**	72 U	72 U	**605**	72 U	140 U	**10800**	72 U	72 U	72 U	**7450**	**15800**	**940**	72 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.8 U	0.05 U	0.05 U	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	4.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.31 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH93-15	BH93-15	BH94-15	BH94-15	BH94-15	BH94-15	BH95-15	BH95-15	BH95-15	BH97-15	BH97-15	BH97-15	BH97-15	BH98-15	BH98-15	BH98-15	BH98-15	BH99-15
					Sample ID	S-11102463-082015-LG-266	S-11102463-082015-LG-267	S-11102463-082415-LG-277	S-11102463-082415-LG-278	S-11102463-082415-LG-279	S-11102463-082415-LG-281	S-11102463-081815-TB-424	S-11102463-081815-TB-425	S-11102463-081815-TB-426	S-11102463-082515-KMV-139	S-11102463-082515-KMV-140	S-11102463-082515-KMV-141	S-11102463-082515-KMV-142	S-11102463-082715-KMV-154	S-11102463-082715-KMV-155	S-11102463-082715-KMV-156	S-11102463-082715-KMV-157	S-11102463-082015-TB-438
					Start Depth	6.09	8.38	0.76	3.05	6.86	3.05	2.28	3.81	6.09	4.57	6.86	6.86	10.67	2.29	2.29	3.05	6.1	1.52
					End Depth	6.7	8.99	1.37	3.66	7.47	3.66	2.89	4.41	6.7	5.18	7.47	7.47	11.28	2.9	2.9	3.66	6.71	2.13
					Date	20 Aug 2015	20 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	20 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.085 U	1.2 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	**0.66**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	**0.84**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.72**	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.53**	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	**0.03**	0.0068 U	0.0068 U	**0.01**	0.0068 U	0.0068 U	0.014 U	**3.54 I**	0.0068 U	0.0068 U	**0.0085**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.065 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	16 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	1.2 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	**0.02**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.036 U	**0.19**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 U	**0.37**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.4 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	2 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.8 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.24 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	**0.04**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	**0.21**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.072 U	0.24 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH99-15	BH99-15	CH2MHILL BH-149D	CH2MHILL BH-149D	CH2MHILL BH-150D	CH2MHILL BH-150D	CH2MHILL BH-150D	CH2MHILL BH-151	CH2MHILL BH-151	CH2MHILL BH-151	CH2MHILL BH-152	CH2MHILL BH-152	CH2MHILL BH-153	CH2MHILL BH-153	CH2MHILL BH-153	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-155	CH2MHILL BH-155	CH2MHILL BH-157	CH2MHILL BH-157
					Sample ID	S-11102463-082015-TB-439	S-11102463-082015-TB-440	BH-149D-D	BH-149D-S	BH-150D-D	BH-150D-I	BH-150D-S	BH-151D	BH-151I	BH-151S	BH-152D	BH-152S	BH-153D	BH-153I	BH-153S	BH-154D	BH-154I	BH-154S	BH-154S	BH-155D	BH-155S	BH-157D	BH-157S
					Start Depth	2.28	6.09	3	2.3	4.6	2.3	0.8	2.3	1.5	0	0.8	0	2.3	0.8	0	3	1.5	0	0	0.8	0	1.5	0
					End Depth	2.89	6.7	3.7	2.9	5.2	2.9	1.4	2.9	2.3	0.6	1.4	0.6	2.9	1.4	0.6	3.7	2.1	0.6	0.6	1.4	0.6	2.1	0.6
					Date	20 Aug 2015	20 Aug 2015	24 Jan 2005	24 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	25 Jan 2005	21 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																								
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																								
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																								
ABN	2,4-Dinitrophenol	µg/g	2	38	59																								
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																								
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																								
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																								
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																								
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																								
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																								
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																								
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																								
ABN	Phenol	µg/g	0.5	9.4	46																								
CHEMISTRY	Ammonia	µg/g																											
CHEMISTRY	Bromide	µg/g																											
CHEMISTRY	Chlorite	µg/g																											
CHEMISTRY	Fluoride	µg/g	110 [c.]																										
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Moisture, percent	%				**12.4**	**17**																						
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																										
CHEMISTRY	Nitrite (as N)	µg/g																											
Chemistry	ortho-Phosphate	µg/g																											
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.91**	**7.77**																						
CHEMISTRY	Sulfate	µg/g																											
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																											
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																								
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																								
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																								
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																								
GENCHEM	MOISTURE AT LIQUID LIMIT	%																											
INORGANIC	Aluminum	µg/g	26000 [c.]																										
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U		1 U			1 U					**3**			1 U			1 U					1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	1 U		**17.7**			**2**					**7**			1 U			**3**					**26**
INORGANIC	Barium	µg/g	220	390		**12.6**	**8.5**		**194.99**			**25.8**					**55.19**			**9.39**			**68.59**					**538.99**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U		**0.39**			**0.09**					**2**			0.09 U			**0.19**					**0.89**
INORGANIC	Boron	µg/g	36	120		5 U	5 U		**5.41**			**0.21**					**0.47**			**0.34**			**1.42**					**1.16**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.32**	0.1 U																						
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U		**0.39**			0.3 U					0.3 U			0.3 U			**0.69**					**6**
INORGANIC	Calcium	µg/g	49000 [c.]																										
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																										
INORGANIC	Chromium	µg/g	70	160		**5.3**	**4**		**24.8**			**5.7**					**7**			**2.09**			**7.79**					**30.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U		0.04 U																				
INORGANIC	Cobalt	µg/g	22	22		**1.4**	**2**		**9.2**			**2.4**					**10.8**			**1.7**			**4.19**					**12.3**
INORGANIC	Copper	µg/g	92	140		**2.5**	**3.1**		**104**			**58.8**					**23.2**			**5.2**			**40.5**					**384**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																								
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.17**	**0.12**																						
INORGANIC	Iron	µg/g	34000 [c.]																										
INORGANIC	Lead	µg/g	120	120		**6.2**	**2.7**		**717.99**			**41**					**119**			**8.5**			**79.7**					**1320**
INORGANIC	Magnesium	µg/g	15000 [c.]																										
INORGANIC	Manganese	µg/g	1400 [c.]																										
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.009**	0.005 U		**2.12**			**0.15**					**0.13**			0.04 U			**0.47**					**0.82**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U		0.6 U			0.6 U					**1.5**			0.6 U			0.6 U					**1.7**
INORGANIC	Nickel	µg/g	82	100		**3.3**	**4.2**		**19.7**			**4.99**					**22.2**			**3**			**8**					**33.39**
INORGANIC	Phosphorus	µg/g	1500 [c.]																										
INORGANIC	Potassium	µg/g	4900 [c.]																										
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U		**2**			1 U					**3**			1 U			1 U					**3**
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U		0.69 U			0.69 U					0.69 U			0.69 U			0.69 U					0.69 U
INORGANIC	Sodium	µg/g	180 [c.]																										
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.71**	**0.43**																						
INORGANIC	Strontium	µg/g	77 [c.]																										
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U		1 U			1 U					1 U			1 U			1 U					1 U
INORGANIC	Titanium	µg/g	4700 [c.]																										
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U																						
INORGANIC	Vanadium	µg/g	86	86		**9**	**6.3**		**24.2**			**9.39**					**13.9**			**4.6**			**14.8**					**22.7**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U																						
INORGANIC	Zinc	µg/g	290	340		**12.3**	**13.1**		**259.99**			**55.39**					**82.9**			**19.3**			**93.69**					**922.99**
METAL	Zirconium	µg/g	48 [e.]																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	BH99-15	BH99-15	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL
						S-11102463-	S-11102463-	BH-149D	BH-149D	BH-150D	BH-150D	BH-150D	BH-151	BH-151	BH-151	BH-152	BH-152	BH-153	BH-153	BH-153	BH-154	BH-154	BH-154	BH-154	BH-155	BH-155	BH-157	BH-157
					Sample ID	082015-TB-439	082015-TB-440	BH-149D-D	BH-149D-S	BH-150D-D	BH-150D-I	BH-150D-S	BH-151D	BH-151I	BH-151S	BH-152D	BH-152S	BH-153D	BH-153I	BH-153S	BH-154D	BH-154I	BH-154S	BH-154S	BH-155D	BH-155S	BH-157D	BH-157S
					Start Depth	2.28	6.09	3	2.3	4.6	2.3	0.8	2.3	1.5	0	0.8	0	2.3	0.8	0	3	1.5	0	0	0.8	0	1.5	0
					End Depth	2.89	6.7	3.7	2.9	5.2	2.9	1.4	2.9	2.3	0.6	1.4	0.6	2.9	1.4	0.6	3.7	2.1	0.6	0.6	1.4	0.6	2.1	0.6
					Date	20 Aug 2015	20 Aug 2015	24 Jan 2005	24 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	25 Jan 2005	21 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																							
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																							
OCP	Hexachloroethane	µg/g	0.01	0.089	22																							
other SVOC	2-Chloroethyl Vinyl Ether	µg/g						0.09 U										0.09 U	4.9 U		0.09 U	9.99 U					0.09 U	
other SVOC	2-Chloronaphthalene	µg/g																										
other SVOC	2-Hexanone	µg/g																										
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																										
other SVOC	4-Chlorophenyl Phenylether	µg/g																										
other SVOC	Bis (2-chloroethoxy) methane	µg/g																										
other SVOC	Butyl benzyl phthalate	µg/g																										
other SVOC	Chloroethane	µg/g						0.01 U										0.01 U	0.98 U		0.01 U	2 U					0.01 U	
other SVOC	Chloromethane	µg/g						0.01 U										0.01 U	0.98 U		0.01 U	2 U					0.01 U	
other SVOC	Di-N-Butylphthalate	µg/g																										
other SVOC	Di-n-octyl phthalate	µg/g																										
other SVOC	Isophorone	µg/g																										
other SVOC	Nitrobenzene	µg/g																										
other SVOC	N-Nitrosodi-N-propylamine	µg/g																										
other SVOC	N-Nitrosodiphenylamine	µg/g																										
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	0.042 U																					
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U																					
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U																					
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U		**0.19**			**0.3**			**0.89**		**0.12**			0.01 U				**0.19**				0.04 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U		0.005 U			**0.14**			**0.21**		**0.06**			0.005 U				**0.07**				**0.06**
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U		**0.44**			**1.55**			**1.62**		**0.62**			**0.12**				0.04 U				**0.04**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	0.05 U		**0.69**			**3.1**			**1.7**		**1.49**			**0.3**				**0.3**				**0.14**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	0.05 U		**0.6**			**2.64**			**1**		**1.26**			**0.26**				**0.16**				**0.16**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																								
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	0.05 U		**0.3**			**1.3**			**0.69**		**0.76**			**0.09**				**0.09**				**0.09**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U		**0.3**			**1.6**			**0.69**		**0.89**			**0.19**				0.19 U				**0.19**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U		**0.19**			**1**			**0.5**		**0.55**			**0.09**				0.09 U				**0.09**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	0.05 U		**0.6**			**2.4**			**1.7**		**1.42**			**0.3**				**0.19**				**0.11**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U		0.01 U			**0.3**			0.19 U		**0.19**			0.19 U				0.19 U				0.09 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	0.05 U		**1.36**			**7.21**			**4.79**		**2.45**			**0.53**				**0.6**				**0.18**
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U		**0.26**			**0.39**			**1.91**		**0.19**			0.005 U				**0.46**				0.02 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U		**0.39**			**1.7**			**0.89**		**1**			**0.19**				0.19 U				**0.19**
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U		**0.25**			0.04 U			**15.6**		**0.19**			**0.07**				**0.76**				**0.28**
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.05 U	0.05 U		**1.38**			**5.67**			**6.57**		**2.46**			**0.39**				**1.25**				**0.19**
PAH	Pyrene	µg/g	1	78	2600	0.05 U	0.05 U		**1.12**			**6.42**			**3.4**		**2.6**			**0.46**				**0.6**				**0.16**
PCB	Aroclor 1016	µg/g																										
PCB	Aroclor 1221	µg/g																										
PCB	Aroclor 1232	µg/g																										
PCB	Aroclor 1242	µg/g																										
PCB	Aroclor 1248	µg/g																										
PCB	Aroclor 1254	µg/g																										
PCB	Aroclor 1260	µg/g																										
PCB	Aroclor 1262	µg/g																										
PCB	Aroclor 1268	µg/g																										
PCB	PCB, Total	µg/g	0.3	0.35																								
Perchlorate	Perchlorate	µg/g																										
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	9.99 U		9.99 U	9.99 U		9.99 U	**2599.99**		9.99 U		9.99 U			9.99 U	**2119.99**	**17.99**		9.99 U	9.99 U	9.99 U	
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U																					
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	9.99 U		9.99 U	**270**		9.99 U	**209.99**		9.99 U		9.99 U			**150**	**8600**	**64**		9.99 U	9.99 U	**15**	
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U																					
PHC	F3 (C16-C34)	µg/g	240	300		50 U	50 U	**130**		9.99 U	**120**		**22**	**1800**		9.99 U		**56**			**190**	**2900**	**959.99**		9.99 U	**37.99**	**330**	
PHC	F3-PAH	µg/g	240	300		50 U	50 U																					
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	**43**		9.99 U	9.99 U		9.99 U	**389.99**		9.99 U		9.99 U			9.99 U	**2700**	**21000**		9.99 U	**54**	**21**	
PHC	F4G-SG	µg/g	120	2800																								
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes																					
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U																					
SVOC	Hexachlorocyclopentadiene	µg/g																										
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.01 U		0.01 U	0.12 U		0.19 U	3.7 U		0.01 U		0.01 U	0.98 U		0.01 U	2 U					0.01 U	
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.0024 U		0.0024 U	0.01 U		0.02 U	0.44 U		0.0024 U		0.0024 U	0.12 U		0.0024 U	0.23 U					0.0024 U	
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.005 U		0.005 U	0.02 U		0.04 U	0.91 U		0.005 U		0.005 U	0.25 U		0.005 U	0.5 U					0.005 U	
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,2-Dichloroethene (Total)	µg/g																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

		Location	BH99-15	BH99-15	CH2MHILL BH-149D	CH2MHILL BH-149D	CH2MHILL BH-150D	CH2MHILL BH-150D	CH2MHILL BH-150D	CH2MHILL BH-151	CH2MHILL BH-151	CH2MHILL BH-151	CH2MHILL BH-152	CH2MHILL BH-152	CH2MHILL BH-153	CH2MHILL BH-153	CH2MHILL BH-153	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-154	CH2MHILL BH-155	CH2MHILL BH-155	CH2MHILL BH-157	CH2MHILL BH-157
		Sample ID	S-11102463-082015-TB-439	S-11102463-082015-TB-440	BH-149D-D	BH-149D-S	BH-150D-D	BH-150D-I	BH-150D-S	BH-151D	BH-151I	BH-151S	BH-152D	BH-152S	BH-153D	BH-153I	BH-153S	BH-154D	BH-154I	BH-154S	BH-154S	BH-155D	BH-155S	BH-157D	BH-157S
		Start Depth	2.28	6.09	3	2.3	4.6	2.3	0.8	2.3	1.5	0	0.8	0	2.3	0.8	0	3	1.5	0	0	0.8	0	1.5	0
		End Depth	2.89	6.7	3.7	2.9	5.2	2.9	1.4	2.9	2.3	0.6	1.4	0.6	2.9	1.4	0.6	3.7	2.1	0.6	0.6	1.4	0.6	2.1	0.6
		Date	20 Aug 2015	20 Aug 2015	24 Jan 2005	24 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	24 Jan 2005	25 Jan 2005	21 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																						
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	0.91 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.15 U		0.15 U	0.89 U		1.4 U	27 U		**0.22**		0.15 U	7.4 U		0.15 U	15 U					0.15 U	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.09 U		0.09 U	0.6 U		0.89 U	17.99 U		0.09 U		0.09 U	4.9 U		0.09 U	9.99 U					0.09 U	
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.15 U		**0.31**	0.89 U		0.07 U	27 U		**0.63**		**0.19**	7.4 U		0.15 U	18.99 U					0.15 U	
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	0.01 U		0.01 U	0.02 U		0.04 U	0.91 U		0.01 U		0.01 U	0.25 U		0.01 U	**3.3**	**0.73**		0.01 U	0.01 U	0.01 U	
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.01 U		0.01 U	0.12 U		0.19 U	3.7 U		0.01 U		0.01 U	0.98 U		0.01 U	2 U					0.01 U	
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.01 U		0.01 U	0.12 U		0.19 U	3.7 U		0.01 U		0.01 U	0.98 U		0.01 U	2 U					0.01 U	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.005 U		0.005 U	0.02 U		0.04 U	0.91 U		0.005 U		0.005 U	0.25 U		0.005 U	0.5 U					0.005 U	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.005 U		0.005 U	0.02 U		0.04 U	0.91 U		0.005 U		0.005 U	0.25 U		0.005 U	0.5 U					0.005 U	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U																				
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.01 U		0.01 U	0.02 U		**0.63**	**289.99**		0.01 U		0.01 U	0.25 U		**0.05**	**36.89**	**0.5**		0.01 U	0.01 U	0.01 U	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.01 U		0.01 U	0.19 U		0.19 U	3.7 U		0.01 U		0.01 U	0.98 U		0.01 U	2 U					0.01 U	
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U																				
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.01 U		0.01 U	0.02 U		**0.98**	**666**		0.01 U		0.01 U	0.25 U		**0.07**	**1**	**0.16**		0.01 U	0.01 U	0.01 U	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.005 U		0.005 U	0.02 U		0.04 U	0.91 U		0.005 U		0.005 U	0.25 U		0.005 U	0.5 U					0.005 U	
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U		0.01 U	0.05 U		0.09 U	1.8 U		0.01 U		0.01 U	0.49 U		0.01 U	1 U					0.01 U	
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.01 U											0.98 U		0.01 U	2 U					0.01 U	
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.003 U		0.003 U	0.01 U		0.02 U	0.55 U		0.003 U		0.003 U	0.15 U		0.003 U	0.3 U					0.003 U	
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.01 U		0.01 U	0.01 U		**0.66**	**433.99**		0.01 U		0.01 U	0.25 U		0.01 U	**3.7**	**0.29**		0.01 U	0.01 U	0.01 U	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U		0.03 U	0.03 U		**1.66**	**968.99**		0.03 U		0.03 U	0.25 U		**0.07**	**35.5**	**1.65**		0.03 U	0.03 U	0.03 U	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.03 U		0.03 U	0.05 U		**2.32**	**1400**		0.03 U		0.03 U	0.49 U		**0.07**	**37.99**	**1.93**		0.03 U	0.03 U	0.03 U	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-159	CH2MHILL BH-159	CH2MHILL BH-160	CH2MHILL BH-160	CH2MHILL BH-161	CH2MHILL BH-161	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-163	CH2MHILL BH-164	CH2MHILL BH-165	CH2MHILL BH-166D	CH2MHILL BH-166D	CH2MHILL BH-166S	CH2MHILL BH-167	CH2MHILL BH-167	CH2MHILL BH-167
					Sample ID	BH-158D	BH-158D	BH-158I	BH-158I	BH-158S	BH-159D	BH-159S	BH-160D	BH-160I	BH-161D	BH-161S	BH-162D	BH-162I	BH-162S	BH-163D	BH-164D	BH-165D	BH-166D-D	BH-166D-S	BH-166S-S	BH-167D	BH-167DD	BH-167S
					Start Depth	2.3	2.3	1.5	1.5	0	2.3	1.5	2.3	1.5	3	2.3	0.76	2.3	0.8	1.5	0.8	2.3	4.6	2.3	1.5	3.05	3.8	0
					End Depth	2.9	2.9	2.1	2.1	0.6	2.9	2.1	2.9	2.1	3.7	2.9	1.4	2.9	1.4	2.1	1.4	2.9	5.2	2.9	2.1	3.65	4.4	0.6
					Date	21 Jan 2005	24 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																								
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																								
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																								
ABN	2,4-Dinitrophenol	µg/g	2	38	59																								
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																								
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																								
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																								
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																								
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																								
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																								
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																								
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																								
ABN	Phenol	µg/g	0.5	9.4	46																								
CHEMISTRY	Ammonia	µg/g																											
CHEMISTRY	Bromide	µg/g																											
CHEMISTRY	Chlorite	µg/g																											
CHEMISTRY	Fluoride	µg/g	110 [c.]																										
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Moisture, percent	%																											
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																										
CHEMISTRY	Nitrite (as N)	µg/g																											
Chemistry	ortho-Phosphate	µg/g																											
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Sulfate	µg/g																											
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																											
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																								
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																								
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																								
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																								
GENCHEM	MOISTURE AT LIQUID LIMIT	%																											
INORGANIC	Aluminum	µg/g	26000 [c.]																										
INORGANIC	Antimony	µg/g	1.3	7.5						1 U																			
INORGANIC	Arsenic	µg/g	18	18						**6**																			
INORGANIC	Barium	µg/g	220	390						**97.3**																			
INORGANIC	Beryllium	µg/g	2.5	4						**0.3**																			
INORGANIC	Boron	µg/g	36	120						**1.04**																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																									
INORGANIC	Cadmium	µg/g	1.2	1.2						**1.6**																			
INORGANIC	Calcium	µg/g	49000 [c.]																										
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																										
INORGANIC	Chromium	µg/g	70	160						**11.2**																			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																									
INORGANIC	Cobalt	µg/g	22	22						**4.69**																			
INORGANIC	Copper	µg/g	92	140						**79.99**																			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																								
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7																									
INORGANIC	Iron	µg/g	34000 [c.]																										
INORGANIC	Lead	µg/g	120	120						**190**																			
INORGANIC	Magnesium	µg/g	15000 [c.]																										
INORGANIC	Manganese	µg/g	1400 [c.]																										
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14					**0.19**																			
INORGANIC	Molybdenum	µg/g	2	6.9						0.6 U																			
INORGANIC	Nickel	µg/g	82	100						**13.7**																			
INORGANIC	Phosphorus	µg/g	1500 [c.]																										
INORGANIC	Potassium	µg/g	4900 [c.]																										
INORGANIC	Selenium	µg/g	1.5	2.4						1 U																			
INORGANIC	Silver	µg/g	0.5	20						0.69 U																			
INORGANIC	Sodium	µg/g	180 [c.]																										
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000																									
INORGANIC	Strontium	µg/g	77 [c.]																										
INORGANIC	Thallium	µg/g	1	1						1 U																			
INORGANIC	Titanium	µg/g	4700 [c.]																										
INORGANIC	Uranium (U)	µg/g	2.5	23																									
INORGANIC	Vanadium	µg/g	86	86						**17**																			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																								
INORGANIC	Zinc	µg/g	290	340						**345**																			
METAL	Zirconium	µg/g	48 [e.]																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-159	CH2MHILL BH-159	CH2MHILL BH-160	CH2MHILL BH-160	CH2MHILL BH-161	CH2MHILL BH-161	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-163	CH2MHILL BH-164	CH2MHILL BH-165	CH2MHILL BH-166D	CH2MHILL BH-166D	CH2MHILL BH-166S	CH2MHILL BH-167	CH2MHILL BH-167	CH2MHILL BH-167
					Sample ID	BH-158D	BH-158D	BH-158I	BH-158I	BH-158S	BH-159D	BH-159S	BH-160D	BH-160I	BH-161D	BH-161S	BH-162D	BH-162I	BH-162S	BH-163D	BH-164D	BH-165D	BH-166D-D	BH-166D-S	BH-166S-S	BH-167D	BH-167DD	BH-167S
					Start Depth	2.3	2.3	1.5	1.5	0	2.3	1.5	2.3	1.5	3	2.3	0.76	2.3	0.8	1.5	0.8	2.3	4.6	2.3	1.5	3.05	3.8	0
					End Depth	2.9	2.9	2.1	2.1	0.6	2.9	2.1	2.9	2.1	3.7	2.9	1.4	2.9	1.4	2.1	1.4	2.9	5.2	2.9	2.1	3.65	4.4	0.6
					Date	21 Jan 2005	24 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																							
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																							
OCP	Hexachloroethane	µg/g	0.01	0.089	22																							
other SVOC	2-Chloroethyl Vinyl Ether	µg/g									0.09 U	4.4 U	0.09 U	4.9 U	0.09 U	0.09 U	4.99 U	0.09 U		97 U								
other SVOC	2-Chloronaphthalene	µg/g																										
other SVOC	2-Hexanone	µg/g																										
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																										
other SVOC	4-Chlorophenyl Phenylether	µg/g																										
other SVOC	Bis (2-chloroethoxy) methane	µg/g																										
other SVOC	Butyl benzyl phthalate	µg/g																										
other SVOC	Chloroethane	µg/g									0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U								
other SVOC	Chloromethane	µg/g									0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U								
other SVOC	Di-N-Butylphthalate	µg/g																										
other SVOC	Di-n-octyl phthalate	µg/g																										
other SVOC	Isophorone	µg/g																										
other SVOC	Nitrobenzene	µg/g																										
other SVOC	N-Nitrosodi-N-propylamine	µg/g																										
other SVOC	N-Nitrosodiphenylamine	µg/g																										
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																							
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76																							
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76																							
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.83**				**0.6**	0.04 U	**0.03**		**5.84**			**0.44**	**0.3**	0.01 U	0.01 U			**0.07**			0.01 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.37**				**0.23**	0.02 U	**0.03**		**1.5**			**0.02**	**0.04**	0.005 U	0.005 U			**0.008**			**0.01**
PAH	Anthracene	µg/g	0.22	0.67	0.67			0.04 U				0.02 U	0.02 U	**0.08**		0.02 U			**1.21**	**0.44**	0.005 U	0.005 U			**0.07**			**0.12**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.34**				**0.5**	**0.25**	**0.15**		**0.5**			**1.3**	**0.56**	0.01 U	0.01 U			**0.13**			**0.98**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.19**				**0.28**	**0.17**	**0.17**		**0.39**			**1.06**	**0.26**	0.005 U	0.005 U			**0.08**			**0.78**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																								
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13			**0.13**				**0.17**	**0.11**	**0.07**		**0.23**			**0.65**	**0.23**	0.01 U	0.01 U			**0.02**			**0.44**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			0.19 U				0.09 U	0.09 U	**0.07**		**0.19**			**0.25**		0.01 U	0.01 U			**0.07**			**0.44**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.18**				**0.19**	**0.12**	**0.09**		**0.3**			**0.63**	**0.22**	0.01 U	0.01 U			**0.04**			**0.28**
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.31**				**0.39**	**0.23**	**0.14**		**0.42**			**0.86**	**0.44**	0.01 U	0.01 U			**0.11**			**1.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			0.19 U				0.09 U	0.09 U	0.01 U		0.09 U			**0.05**	0.09 U	0.01 U	0.01 U			0.01 U			**0.12**
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.65**				**0.84**	**0.53**	**0.31**		**1.84**			**3.56**	**1.2**	0.005 U	0.005 U			**0.26**			**1.3**
PAH	Fluorene	µg/g	0.19	62	62			**0.95**				**0.71**	0.02 U	**0.04**		**7.12**			**0.53**	**0.27**	0.005 U	0.005 U			**0.07**			**0.02**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			0.19 U				0.09 U	0.09 U	**0.04**		**0.19**			**0.26**	0.09 U	0.01 U	0.01 U			**0.07**			**0.5**
PAH	Naphthalene	µg/g	0.09	0.6	200			0.04 U				**0.25**	**0.03**	0.005 U		**6.3**			**4.19**	**15**	0.005 U	0.005 U			**1.65**			**0.03**
PAH	Phenanthrene	µg/g	0.69	6.2	270			**2.11**				**1.38**	**0.6**	**0.18**		**13.2**			**3.22**	**1**	0.005 U	0.005 U			**0.27**			**0.41**
PAH	Pyrene	µg/g	1	78	2600			**1.08**				**1.26**	**0.58**	**0.44**		**2.49**			**3.43**	**1.28**	0.005 U	0.005 U			**0.22**			**1.68**
PCB	Aroclor 1016	µg/g																										
PCB	Aroclor 1221	µg/g																										
PCB	Aroclor 1232	µg/g																										
PCB	Aroclor 1242	µg/g																										
PCB	Aroclor 1248	µg/g																										
PCB	Aroclor 1254	µg/g																										
PCB	Aroclor 1260	µg/g																										
PCB	Aroclor 1262	µg/g																										
PCB	Aroclor 1268	µg/g																										
PCB	PCB, Total	µg/g	0.3	0.35																								
Perchlorate	Perchlorate	µg/g																										
PHC	F1 (C6-C10)	µg/g	25	55	55	9.99 U		**30.99**				**74**	9.99 U	**194.99**	**28**	**183**		9.99 U	**644.99**	**2300**	**35**	9.99 U	9.99 U	**2480**		2.9 U	**59.99**	
PHC	F1-BTEX	µg/g	25	55	55																							
PHC	F2 (C10-C16)	µg/g	10	98	230	**75.99**		**800**				**509.99**	9.99 U	**71**	**97**	**1000**		**63**	**970**	**1700**	**170**	9.99 U	9.99 U	**2800**		**68**	**63**	
PHC	F2-Naphth	µg/g	10	98	230																							
PHC	F3 (C16-C34)	µg/g	240	300		**360**		**509.99**				**990**	**209.99**	**24**	**319.99**	**819.99**		**579.99**	**180**	**310**	**68.99**	**34**	**190**	**440**		**35.99**	**1000**	
PHC	F3-PAH	µg/g	240	300																								
PHC	F4 (C34-C50)	µg/g	120	2800		**899.99**		**1200**				**150**	**21**	9.99 U	**32**	**45**		**110**	**33**	**75.99**	9.99 U	9.99 U	**150**	**300**		9.99 U	**100**	
PHC	F4G-SG	µg/g	120	2800																								
PHC	**Chrom. to baseline at nC5No**	None																										
PHC	Total Hydrocarbons (C6-C50)	µg/g																										
SVOC	Hexachlorocyclopentadiene	µg/g																										
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120		0.01 U		0.18 U		0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U	0.66 U	0.01 U	0.01 U	17.99 U		1.8 U	0.01 U	
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		0.0024 U		0.02 U		0.0024 U	0.11 U	0.0024 U	0.12 U	0.0024 U	0.0024 U	0.12 U	0.0024 U		2.3 U	0.07 U	0.0024 U	0.0024 U	2.09 U		0.21 U	0.0024 U	
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		0.005 U		0.04 U		0.005 U	0.22 U	0.005 U	0.25 U	0.005 U	0.005 U	0.25 U	0.005 U		4.9 U	0.17 U	0.005 U	0.005 U	4.4 U		0.44 U	0.005 U	
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,2-Dichloroethene (Total)	µg/g																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-158	CH2MHILL BH-159	CH2MHILL BH-159	CH2MHILL BH-160	CH2MHILL BH-160	CH2MHILL BH-161	CH2MHILL BH-161	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-162	CH2MHILL BH-163	CH2MHILL BH-164	CH2MHILL BH-165	CH2MHILL BH-166D	CH2MHILL BH-166D	CH2MHILL BH-166S	CH2MHILL BH-167	CH2MHILL BH-167	CH2MHILL BH-167
					Sample ID	BH-158D	BH-158D	BH-158I	BH-158I	BH-158S	BH-159D	BH-159S	BH-160D	BH-160I	BH-161D	BH-161S	BH-162D	BH-162I	BH-162S	BH-163D	BH-164D	BH-165D	BH-166D-D	BH-166D-S	BH-166S-S	BH-167D	BH-167DD	BH-167S
					Start Depth	2.3	2.3	1.5	1.5	0	2.3	1.5	2.3	1.5	3	2.3	0.76	2.3	0.8	1.5	0.8	2.3	4.6	2.3	1.5	3.05	3.8	0
					End Depth	2.9	2.9	2.1	2.1	0.6	2.9	2.1	2.9	2.1	3.7	2.9	1.4	2.9	1.4	2.1	1.4	2.9	5.2	2.9	2.1	3.65	4.4	0.6
					Date	21 Jan 2005	24 Jan 2005	21 Jan 2005	24 Jan 2005	24 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	20 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005	26 Jan 2005
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																									
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	2-Butanone	µg/g	0.5	16	230		0.15 U		1.3 U		0.15 U	6.6 U	0.15 U	7.4 U	**0.19**	0.15 U	7.49 U	0.15 U		150 U	4.99 U	0.15 U	0.15 U	130 U		13 U	0.15 U	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		0.09 U		0.89 U		0.09 U	4.4 U	0.09 U	4.9 U	0.09 U	0.09 U	4.99 U	0.09 U		97 U	3.3 U	0.09 U	0.09 U	89 U		8.8 U	0.09 U	
VOC	Acetone	µg/g	0.5	16	16		**0.25**		1.3 U		**0.19**	6.6 U	**0.22**	7.4 U	0.15 U	0.15 U	7.49 U	**0.23**		150 U	4.99 U	0.15 U	**0.66**	130 U		13 U	**0.36**	
VOC	Benzene	µg/g	0.02	0.21	14	0.01 U	0.005 U	0.01 U	0.04 U		0.005 U	0.22 U	0.01 U	0.25 U	**0.49**	**0.16**	0.25 U	0.01 U	0.19 U	4.9 U	0.17 U	0.01 U	0.01 U	4.4 U		0.44 U	0.01 U	
VOC	Bromodichloromethane	µg/g	0.05	13	50		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Bromoform	µg/g	0.05	0.27	21		0.01 U		0.18 U		0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U	0.66 U	0.01 U	0.01 U	17.99 U		1.8 U	0.01 U	
VOC	Bromomethane	µg/g	0.05	0.05	1.4		0.01 U		0.18 U		0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U	0.66 U	0.01 U	0.01 U	17.99 U		1.8 U	0.01 U	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		0.005 U		0.04 U		0.005 U	0.22 U	0.005 U	0.25 U	0.005 U	0.005 U	0.25 U	0.005 U		4.9 U	0.17 U	0.005 U	0.005 U	4.4 U		0.44 U	0.005 U	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Chloroform	µg/g	0.05	0.05	9.5		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.09 U	8.89 U		0.88 U	0.01 U	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	**0.12**	8.89 U		0.88 U	**0.05**	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			0.005 U		0.04 U		0.005 U	0.22 U	0.005 U	0.25 U	0.005 U	0.005 U	0.25 U	0.005 U		4.9 U	0.17 U	0.005 U	0.005 U	4.4 U		0.44 U	0.005 U	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																								
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		**460**	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Ethylbenzene	µg/g	0.05	2	17	0.01 U	0.005 U	0.01 U	0.04 U		**0.04**	0.22 U	**0.05**	0.25 U	**0.14**	**1.28**	**3.89**	**0.06**	**32**	**155**	0.17 U	0.01 U	**0.73**	**219**		**25**	**5.39**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		0.01 U		0.18 U		0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U	0.66 U	0.01 U	0.01 U	17.99 U		1.8 U	0.01 U	
VOC	n-Hexane	µg/g	0.05	2.8	54																								
VOC	Styrene	µg/g	0.05	0.7	66		0.01 U		0.89 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		0.01 U		0.89 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Toluene	µg/g	0.2	2.3	68	**0.13**	**0.02**	0.01 U	0.04 U		**0.11**	0.22 U	**0.12**	0.25 U	**0.12**	**0.19**	0.25 U	0.01 U	0.19 U	**349.99**	0.17 U	0.01 U	**0.86**	**266**		**32**	**11.8**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			0.005 U		0.04 U		0.005 U	0.22 U	0.005 U	0.25 U	0.005 U	0.005 U	0.25 U	0.005 U		4.9 U	0.69 U	0.005 U	0.005 U	4.4 U		0.44 U	0.005 U	
VOC	Trichloroethylene	µg/g	0.05	0.061	300		0.01 U		0.09 U		0.01 U	0.44 U	0.01 U	0.49 U	0.01 U	0.01 U	0.5 U	0.01 U		9.7 U	0.33 U	0.01 U	0.01 U	8.89 U		0.88 U	0.01 U	
VOC	Trichlorofluoromethane	µg/g	0.25	4							0.01 U	0.88 U	0.01 U	0.98 U	0.01 U	0.01 U	0.98 U	0.01 U		18.99 U								
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		0.003 U		0.02 U		0.003 U	0.13 U	0.003 U	0.15 U	0.003 U	0.003 U	0.15 U	0.003 U		2.9 U	0.09 U	0.003 U	**0.03**	2.7 U		0.26 U	0.003 U	
VOC	Xylene, o	µg/g	0.05	3.1	26	0.01 U		0.01 U			**0.03**	0.22 U	**0.09**	0.25 U	**0.19**	**18.99**	**2**	**0.02**	**20**	**460**	0.01 U	0.01 U	**0.81**	**308**		**19.7**	**6.86**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U		0.03 U			**0.07**	**0.26**	**0.22**	0.25 U	**0.42**	**0.75**	**13**	**0.18**	**114**	**1200**	0.03 U	**0.22**	**1.99**	**657**		**50.99**	**17.3**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.03 U	0.01 U	0.03 U	0.09 U		**0.11**	0.44 U	**0.31**	0.49 U	**0.62**	**0.94**	**15**	**0.21**	**134**	**1700**	0.33 U	**0.22**	**2.79**	**963.99**		**86**	**24.2**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-168	CH2MHILL BH-168	CH2MHILL BH-169	CH2MHILL BH-169	CH2MHILL BH-170	CH2MHILL BH-170	CH2MHILL BH-171	CH2MHILL BH-171	CH2MHILL BH-172	CH2MHILL BH-172	CH2MHILL BH-173	CH2MHILL BH-173	CH2MHILL BH-174	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-176	CH2MHILL BH-176	CH2MHILL BH-177	CH2MHILL BH-178	CH2MHILL BH-178	CH2MHILL BH18	CH2MHILL BH18
					Sample ID	BH-168D	BH-168S	BH-169D	BH-169S	BH-170D	BH-170S	BH-171D	BH-171S	BH-172D	BH172S	BH-173D	BH-173S	BH-174	BH-175D	BH-175I	BH-175S	BH-176D	BH-176S	BH-177	BH-178	BH-178	BH18D	BH18S
					Start Depth	3.05	0.81	1.5	0.76	1.5	0.76	2.3	0	1.5	0	0.76	0	0.76	3	2.3	0.76	1.5	0.76	0	0	1.5	0.75	0
					End Depth	3.65	1.4	2.7	1.4	2.1	1	2.9	0.6	2.1	0.6	1.4	0.6	1.4	3.7	2.9	1.4	2.1	1.37	0.6	0.6	2.1	1.35	0.6
					Date	26 Jan 2005	26 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	21 Jan 2005	24 Jan 2005	19 Oct 2006	02 Nov 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																								
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																							0.07 U	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																								
ABN	2,4-Dinitrophenol	µg/g	2	38	59																								
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																								
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																								
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																								
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																								
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																								
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																								
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																								
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																								
ABN	Phenol	µg/g	0.5	9.4	46																								
CHEMISTRY	Ammonia	µg/g																											
CHEMISTRY	Bromide	µg/g																											
CHEMISTRY	Chlorite	µg/g																											
CHEMISTRY	Fluoride	µg/g	110 [c.]																										
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Moisture, percent	%																											
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																										
CHEMISTRY	Nitrite (as N)	µg/g																											
Chemistry	ortho-Phosphate	µg/g																											
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Sulfate	µg/g																											
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																											
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																								
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																								
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																								
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																								
GENCHEM	MOISTURE AT LIQUID LIMIT	%																											
INORGANIC	Aluminum	µg/g	26000 [c.]																										
INORGANIC	Antimony	µg/g	1.3	7.5					1 U	1 U	1 U		1 U		1 U		1 U	**1**			1 U		1 U	1 U		1 U		**3.8**	
INORGANIC	Arsenic	µg/g	18	18					**1**	**2**	**1**		**4.99**		1 U		**2**	**1**			**8.99**		**4.99**	**9.99**		**25.69**		**26.69**	
INORGANIC	Barium	µg/g	220	390					**52.09**	**44.7**	**33.9**		**112**		**11.5**		**98.09**	**24**			**22.39**		**116**	**117**		**122**		**294**	
INORGANIC	Beryllium	µg/g	2.5	4					**0.19**	**0.19**	**0.19**		**0.3**		0.09 U		**0.39**	**0.09**			**0.19**		**0.39**	**0.3**		**0.39**		**1.4**	
INORGANIC	Boron	µg/g	36	120					**0.14**	**1.15**	**1.56**		**0.57**		**0.07**		**0.42**	**0.98**			**0.82**		**1.57**	**1.94**		**1.18**			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																									
INORGANIC	Cadmium	µg/g	1.2	1.2					**0.39**	**0.39**	0.3 U		0.3 U		0.3 U		0.3 U	0.3 U			0.3 U		0.3 U	**1.3**		**0.89**		**1.9**	
INORGANIC	Calcium	µg/g	49000 [c.]																										
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																										
INORGANIC	Chromium	µg/g	70	160					13.2 U	**8.39**	**7.4**		**11.5**		**4.4**		**15.69**	**4**			**4.19**		**14**	**8.7**		**13.5**		**30.6**	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																									
INORGANIC	Cobalt	µg/g	22	22					**6.5**	**4.9**	**4.6**		**4.69**		**2.4**		**6.3**	**2.7**			**4.4**		**6**	**4.9**		**15.6**		**9.7**	
INORGANIC	Copper	µg/g	92	140					**14.3**	**33.79**	**12.6**		**48.2**		**9.39**		**34.8**	**10.1**			**23**		**96.9**	**37.59**		**55.79**		**180**	
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																								
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7																									
INORGANIC	Iron	µg/g	34000 [c.]																										
INORGANIC	Lead	µg/g	120	120					**3.5**	**52.7**	**19.6**		**184**		**12**		**173.99**	**28.3**			**23.2**		**289**	**95.79**		**252.99**		**535**	
INORGANIC	Magnesium	µg/g	15000 [c.]																										
INORGANIC	Manganese	µg/g	1400 [c.]																										
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14				0.04 U	**0.12**	**0.05**		**0.57**		**0.15**		**0.39**	**0.09**			**0.07**		**1.86**	**0.19**		**0.14**			
INORGANIC	Molybdenum	µg/g	2	6.9					0.6 U	0.6 U	0.6 U		0.6 U		0.6 U		0.6 U	0.6 U			0.6 U		0.6 U	0.6 U		**0.79**		**3.19**	
INORGANIC	Nickel	µg/g	82	100					**11.7**	**10.2**	**8.99**		**15.5**		**4**		**17.8**	**8**			**8.99**		**12.3**	**11.3**		**29.5**		**30.4**	
INORGANIC	Phosphorus	µg/g	1500 [c.]																										
INORGANIC	Potassium	µg/g	4900 [c.]																										
INORGANIC	Selenium	µg/g	1.5	2.4					1 U	1 U	1 U		1 U		1 U		1 U	1 U			1 U		1 U	1 U		1 U		**2.2**	
INORGANIC	Silver	µg/g	0.5	20					0.69 U	0.69 U	0.69 U		0.69 U		0.69 U		0.69 U	0.69 U			0.69 U		0.69 U	0.69 U		0.69 U		**0.79**	
INORGANIC	Sodium	µg/g	180 [c.]																										
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000																									
INORGANIC	Strontium	µg/g	77 [c.]																										
INORGANIC	Thallium	µg/g	1	1					1 U	1 U	1 U		1 U		1 U		1 U	1 U			1 U		1 U	1 U		1 U		**0.5**	
INORGANIC	Titanium	µg/g	4700 [c.]																										
INORGANIC	Uranium (U)	µg/g	2.5	23																									
INORGANIC	Vanadium	µg/g	86	86					**20.8**	**13.8**	**12.7**		**17.99**		**14.8**		**25.69**	**10.4**			**9.2**		**22.5**	**14.8**		**16.89**		**33**	
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																								
INORGANIC	Zinc	µg/g	290	340					**56.89**	**55.9**	**36.3**		**147**		**18.4**		**80.89**	**43.49**			**43.6**		**155**	**122**		**182**		**828**	
METAL	Zirconium	µg/g	48 [e.]																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-168	CH2MHILL BH-168	CH2MHILL BH-169	CH2MHILL BH-169	CH2MHILL BH-170	CH2MHILL BH-170	CH2MHILL BH-171	CH2MHILL BH-171	CH2MHILL BH-172	CH2MHILL BH-172	CH2MHILL BH-173	CH2MHILL BH-173	CH2MHILL BH-174	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-176	CH2MHILL BH-176	CH2MHILL BH-177	CH2MHILL BH-178	CH2MHILL BH-178	CH2MHILL BH18	CH2MHILL BH18
					Sample ID	BH-168D	BH-168S	BH-169D	BH-169S	BH-170D	BH-170S	BH-171D	BH-171S	BH-172D	BH172S	BH-173D	BH-173S	BH-174	BH-175D	BH-175I	BH-175S	BH-176D	BH-176S	BH-177	BH-178	BH-178	BH18D	BH18S
					Start Depth	3.05	0.81	1.5	0.76	1.5	0.76	2.3	0	1.5	0	0.76	0	0.76	3	2.3	0.76	1.5	0.76	0	0	1.5	0.75	0
					End Depth	3.65	1.4	2.7	1.4	2.1	1	2.9	0.6	2.1	0.6	1.4	0.6	1.4	3.7	2.9	1.4	2.1	1.37	0.6	0.6	2.1	1.35	0.6
					Date	26 Jan 2005	26 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	21 Jan 2005	24 Jan 2005	19 Oct 2006	02 Nov 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																								
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																								
OCP	Hexachloroethane	µg/g	0.01	0.089	22																								
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																											
other SVOC	2-Chloronaphthalene	µg/g																											
other SVOC	2-Hexanone	µg/g																											
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																											
other SVOC	4-Chlorophenyl Phenylether	µg/g																											
other SVOC	Bis (2-chloroethoxy) methane	µg/g																											
other SVOC	Butyl benzyl phthalate	µg/g																											
other SVOC	Chloroethane	µg/g																											
other SVOC	Chloromethane	µg/g																											
other SVOC	Di-N-Butylphthalate	µg/g																											
other SVOC	Di-n-octyl phthalate	µg/g																											
other SVOC	Isophorone	µg/g																											
other SVOC	Nitrobenzene	µg/g																											
other SVOC	N-Nitrosodi-N-propylamine	µg/g																											
other SVOC	N-Nitrosodiphenylamine	µg/g																											
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																								
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76																								
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76																								
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.33**		0.01 U	**0.07**	**0.22**		**0.19**		**0.01**	0.01 U		0.04 U	**0.15**				**0.28**	0.04 U	**0.19**		**1.3**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.03**		0.005 U	0.02 U	**0.009**		**0.06**		**0.01**	**0.006**		0.02 U	**0.01**				**0.09**	0.02 U	**0.21**		**0.12**	
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.25**		0.005 U	0.02 U	**0.17**		**1.35**		**0.1**	**0.1**		**0.33**	**0.22**				**0.89**	0.02 U	**0.75**		**0.62**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.34**		0.01 U	**0.31**	**0.26**		**2**		**0.39**	**0.17**		**0.16**	**0.16**				**1.7**	**0.21**	**1.71**		**0.36**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.32**		0.005 U	**0.23**	**0.21**		**1.21**		**0.31**	**0.11**		0.02 U	**0.08**				**0.96**	**0.2**	**1.77**		**0.23**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																									
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13		**0.19**		0.01 U	**0.19**	**0.13**		**0.89**		**0.19**	**0.18**		**0.12**	**0.03**				**0.73**	**0.14**	**1.11**		**0.28**	
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.19**		0.01 U	**0.19**	**0.11**		**0.44**		**0.13**	**0.04**		**0.09**	**0.02**				**0.31**	**0.09**	**1.1**		**0.12**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.12**		0.01 U	**0.19**	**0.14**		**0.62**		**0.19**	**0.17**		**0.19**	**0.04**				**0.56**	**0.15**	**0.92**		**0.09**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.36**		0.01 U	**0.31**	**0.19**		**1.29**		**0.25**	**0.11**		**0.14**	**0.13**				**1.16**	**0.23**	**1.49**		**0.36**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.05**		0.01 U	0.09 U	0.01 U		**0.12**		**0.02**	0.01 U		0.09 U	0.01 U				**0.09**	0.09 U	**0.3**		0.01 U	
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.83**		0.005 U	**0.83**	**0.66**		**4.31**		**0.69**	**0.2**		**0.33**	**0.27**				**3.59**	**0.64**	**3.77**		**0.09**	
PAH	Fluorene	µg/g	0.19	62	62		**0.32**		0.005 U	0.02 U	**0.14**		**0.23**		0.005 U	**0.01**		**0.24**	**0.09**				**0.32**	0.02 U	**0.16**		**0.82**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.23**		0.01 U	**0.09**	**0.09**		**0.44**		**0.12**	**0.04**		0.09 U	**0.02**				**0.34**	0.09 U	**1.1**		**0.09**	
PAH	Naphthalene	µg/g	0.09	0.6	200		**17.99**		0.005 U	**0.1**	**0.03**		**0.11**		**0.01**	0.03 U		**0.08**	0.02 U				**0.05**	**0.4**	**0.17**		**2.9**	
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.95**		0.005 U	**0.54**	**0.52**		**2.61**		**0.17**	**0.14**		0.02 U	**0.56**				**2.23**	**0.57**	**1.94**		**2.4**	
PAH	Pyrene	µg/g	1	78	2600		**0.69**		0.005 U	**0.83**	**0.64**		**5.02**		**0.57**	**0.22**		**0.19**	**0.4**				**3.22**	**0.61**	**4.08**		**1.1**	
PCB	Aroclor 1016	µg/g																											
PCB	Aroclor 1221	µg/g																											
PCB	Aroclor 1232	µg/g																											
PCB	Aroclor 1242	µg/g																											
PCB	Aroclor 1248	µg/g																											
PCB	Aroclor 1254	µg/g																											
PCB	Aroclor 1260	µg/g																											
PCB	Aroclor 1262	µg/g																											
PCB	Aroclor 1268	µg/g																											
PCB	PCB, Total	µg/g	0.3	0.35																									
Perchlorate	Perchlorate	µg/g																											
PHC	F1 (C6-C10)	µg/g	25	55	55	**23**	**8840**	9.99 U		9.99 U		9.99 U								9.99 U		9.99 U							
PHC	F1-BTEX	µg/g	25	55	55																								
PHC	F2 (C10-C16)	µg/g	10	98	230	**59.99**	**1900**	9.99 U		**340**		9.99 U								**56**		9.99 U							
PHC	F2-Naphth	µg/g	10	98	230																								
PHC	F3 (C16-C34)	µg/g	240	300		**750**	**310**	**100**		**3300**		**30.99**								**839.99**		**190**							
PHC	F3-PAH	µg/g	240	300																									
PHC	F4 (C34-C50)	µg/g	120	2800		**97.99**	**52.99**	**230**		**910**		**9.99**								**130**		**150**							
PHC	F4G-SG	µg/g	120	2800																									
PHC	**Chrom. to baseline at nC5No**	None																											
PHC	Total Hydrocarbons (C6-C50)	µg/g																											
SVOC	Hexachlorocyclopentadiene	µg/g																											
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U			
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U	0.04 U	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U	0.09 U	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.96 U	370 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.12 U	44 U		0.0024 U	0.0024 U			0.0024 U	0.0024 U		0.0024 U		0.0024 U	0.0024 U				0.0024 U			0.0024 U		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.23 U	92 U		0.005 U	0.005 U			0.005 U	0.005 U		0.005 U		0.005 U	0.005 U				0.005 U			0.005 U		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.23 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U		0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,2-Dichloroethene (Total)	µg/g																											

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	CH2MHILL BH-168	CH2MHILL BH-168	CH2MHILL BH-169	CH2MHILL BH-169	CH2MHILL BH-170	CH2MHILL BH-170	CH2MHILL BH-171	CH2MHILL BH-171	CH2MHILL BH-172	CH2MHILL BH-172	CH2MHILL BH-173	CH2MHILL BH-173	CH2MHILL BH-174	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-175	CH2MHILL BH-176	CH2MHILL BH-176	CH2MHILL BH-177	CH2MHILL BH-178	CH2MHILL BH-178	CH2MHILL BH18	CH2MHILL BH18
						Sample ID	BH-168D	BH-168S	BH-169D	BH-169S	BH-170D	BH-170S	BH-171D	BH-171S	BH-172D	BH172S	BH-173D	BH-173S	BH-174	BH-175D	BH-175I	BH-175S	BH-176D	BH-176S	BH-177	BH-178	BH-178	BH18D	BH18S
						Start Depth	3.05	0.81	1.5	0.76	1.5	0.76	2.3	0	1.5	0	0.76	0	0.76	3	2.3	0.76	1.5	0.76	0	0	1.5	0.75	0
						End Depth	3.65	1.4	2.7	1.4	2.1	1	2.9	0.6	2.1	0.6	1.4	0.6	1.4	3.7	2.9	1.4	2.1	1.37	0.6	0.6	2.1	1.35	0.6
						Date	26 Jan 2005	26 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	19 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	18 Jan 2005	19 Jan 2005	21 Jan 2005	24 Jan 2005	19 Oct 2006	02 Nov 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																									
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	2-Butanone	µg/g	0.5	16	230	7.3 U	2800 U		0.15 U	0.15 U			0.15 U	0.15 U			0.15 U		0.15 U	0.15 U				0.15 U			0.15 U		
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	4.8 U	1800 U		0.09 U	0.09 U			0.09 U	0.09 U			0.09 U		0.09 U	0.09 U				0.09 U			0.09 U		
VOC	Acetone	µg/g	0.5	16	16	7.3 U	2800 U		0.15 U	0.15 U			0.15 U	0.15 U			0.15 U		0.15 U	0.15 U				0.15 U			**0.25**		
VOC	Benzene	µg/g	0.02	0.21	14	0.23 U	92 U	0.01 U	0.005 U	0.01 U		0.01 U	0.005 U	0.005 U			0.005 U		0.005 U	0.005 U	0.01 U		0.01 U	0.005 U			0.005 U		
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Bromoform	µg/g	0.05	0.27	21	0.96 U	370 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.96 U	370 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.23 U	92 U		0.005 U	0.005 U			0.005 U	0.005 U			0.005 U		0.005 U	0.005 U				0.005 U			0.005 U		
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.47 U	180 U		0.09 U	0.09 U			0.09 U	0.09 U			0.09 U		0.09 U	0.09 U				0.09 U			0.01 U		
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.23 U	92 U		0.005 U	0.005 U			0.005 U	0.005 U			0.005 U		0.005 U	0.005 U				0.005 U			0.005 U		
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																								
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Ethylbenzene	µg/g	0.05	2	17	**7.7**	**2700**	0.01 U	0.005 U	0.01 U		0.01 U	0.005 U	0.005 U			0.005 U		0.005 U	0.005 U	0.01 U		0.01 U	0.005 U			0.005 U		
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.96 U	370 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	n-Hexane	µg/g	0.05	2.8	54																								
VOC	Styrene	µg/g	0.05	0.7	66	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U	0.04 U	
VOC	Toluene	µg/g	0.2	2.3	68	0.23 U	**1900**	0.01 U	0.005 U	0.01 U		0.01 U	0.005 U	0.005 U			0.005 U		0.005 U	**0.006**	**0.02**		**0.02**	**0.005**			0.005 U	0.04 U	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U		
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.23 U	92 U		0.005 U	0.005 U			0.005 U	0.005 U			0.005 U		0.005 U	0.005 U				0.005 U			0.005 U		
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.47 U	180 U		0.01 U	0.01 U			0.01 U	0.01 U			0.01 U		0.01 U	0.01 U				0.01 U			0.01 U	0.03 U	
VOC	Trichlorofluoromethane	µg/g	0.25	4																								0.07 U	
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.15 U	55 U		0.003 U	0.003 U			0.003 U	0.003 U			0.003 U		0.003 U	0.003 U				0.003 U			0.003 U	0.09 U	
VOC	Xylene, o	µg/g	0.05	3.1	26	**1.36**	**855**	0.01 U		0.01 U		0.01 U									0.01 U		**0.05**					**0.33**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**9.99**	**2089.99**	0.03 U		0.03 U		0.03 U									0.03 U		0.03 U					**1.6**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**26**	**11000**	0.03 U	0.01 U	0.03 U		0.03 U	0.01 U	0.01 U			0.01 U		0.01 U	0.01 U	0.03 U		**0.05**	0.01 U			0.01 U	**1.9**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL MW10	CH2MHILL MW13	CH2MHILL MW19	CH2MHILL MW2	CH2MHILL MW2	CH2MHILL MW3	CH2MHILL MW3	CH2MHILL MW4	CH2MHILL MW5	CH2MHILL MW6	CH2MHILL MW7	CH2MHILL MW7	CH2MHILL MW8	CH2MHILL MW9	DCS BH06-1	DCS BH06-1	DCS BH06-1	DCS BH06-2	DCS BH06-2	DCS BH06-2	DCS BH06-3	DCS BH06-3	DCS BH06-3
					Sample ID	MW10D	MW13i	MW19i	MW2D	MW2S	MW3D	MW3S	MW4I	MW5	MW6D	MW7D	MW7D	MW8D	MW9I	BH06-1 SS1	BH06-1 SS2	BH06-1 SS2B	BH06-2 SS1	BH06-2 SS2	BH06-2 SS3	BH06-3 SS1	BH06-3 SS2	BH06-3 SS3
					Start Depth	3.05	2.4	0.75	3.4	1.5	1.7	0.9	2.74	3.05	3.05	2.44	2.44	3.05	1.83	0	1.2	1.8	0	1.2	2.4	0	1.2	2.4
					End Depth	3.66	3.6	1.5	3.4	1.8	2	1.2	3.05	3.35	3.66	3.05	3.05	3.66	2.44	1.2	2.4	2.4	1.2	2.4	3.7	1.2	2.4	3.7
					Date	15 Aug 2006	19 Oct 2006	27 Oct 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	16 Aug 2006	15 Aug 2006	15 Aug 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																										
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																										
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43		0.007 U	0.07 U																							
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																										
ABN	2,4-Dinitrophenol	µg/g	2	38	59																										
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																										
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																										
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																										
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																										
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																										
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																										
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																										
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																										
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																										
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																										
ABN	Phenol	µg/g	0.5	9.4	46																										
CHEMISTRY	Ammonia	µg/g																													
CHEMISTRY	Bromide	µg/g																													
CHEMISTRY	Chlorite	µg/g																													
CHEMISTRY	Fluoride	µg/g	110 [c.]																												
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																												
CHEMISTRY	Moisture, percent	%				**12.2**							**16.29**	**12.3**	**52.7**		**52.7**	**44.79**	**38.7**												
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																												
CHEMISTRY	Nitrite (as N)	µg/g																													
Chemistry	ortho-Phosphate	µg/g																													
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																												
CHEMISTRY	Sulfate	µg/g																													
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																													
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																										
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																										
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																										
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																										
GENCHEM	MOISTURE AT LIQUID LIMIT	%																													
INORGANIC	Aluminum	µg/g	26000 [c.]																												
INORGANIC	Antimony	µg/g	1.3	7.5																**0.89**			0.19 U	0.19 U		0.19 U		0.19 U
INORGANIC	Arsenic	µg/g	18	18																**2**			1 U	1 U		**1**		**2**
INORGANIC	Barium	µg/g	220	390																**22.29**			**33.7**	**16.89**		**38.3**		**61.99**
INORGANIC	Beryllium	µg/g	2.5	4																0.19 U			**0.19**	0.19 U		0.19 U		**0.3**
INORGANIC	Boron	µg/g	36	120																**1.45**			**0.13**	**0.26**		**0.07**		**1.16**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																								
INORGANIC	Cadmium	µg/g	1.2	1.2																**0.19**			0.09 U	0.09 U		0.09 U		0.09 U
INORGANIC	Calcium	µg/g	49000 [c.]																									
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																									
INORGANIC	Chromium	µg/g	70	160																**6**			**12**	**7**		**12**		**12**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																								
INORGANIC	Cobalt	µg/g	22	22																**2.09**			**4.6**	**2.7**		**4.6**		**4.4**
INORGANIC	Copper	µg/g	92	140																**23.9**			**18.99**	**5.7**		**19.4**		**11.8**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																							
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7																								
INORGANIC	Iron	µg/g	34000 [c.]																									
INORGANIC	Lead	µg/g	120	120																**85**			**6**	**3**		**4.99**		**6**
INORGANIC	Magnesium	µg/g	15000 [c.]																									
INORGANIC	Manganese	µg/g	1400 [c.]																									
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14															0.04 U			0.04 U	0.04 U		0.04 U		0.04 U
INORGANIC	Molybdenum	µg/g	2	6.9																0.5 U			0.5 U	0.5 U		0.5 U		0.5 U
INORGANIC	Nickel	µg/g	82	100																**4.6**			**9.49**	**5.2**		**9.3**		**9.39**
INORGANIC	Phosphorus	µg/g	1500 [c.]																									
INORGANIC	Potassium	µg/g	4900 [c.]																									
INORGANIC	Selenium	µg/g	1.5	2.4																0.5 U			0.5 U	0.5 U		0.5 U		0.5 U
INORGANIC	Silver	µg/g	0.5	20																0.19 U			0.19 U	0.19 U		0.19 U		0.19 U
INORGANIC	Sodium	µg/g	180 [c.]																									
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000																								
INORGANIC	Strontium	µg/g	77 [c.]																									
INORGANIC	Thallium	µg/g	1	1																0.04 U			**0.05**	0.04 U		**0.05**		**0.05**
INORGANIC	Titanium	µg/g	4700 [c.]																									
INORGANIC	Uranium (U)	µg/g	2.5	23																								
INORGANIC	Vanadium	µg/g	86	86																**8.99**			**15**	**7**		**16**		**16**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																							
INORGANIC	Zinc	µg/g	290	340																**45**			**24**	**15**		**22**		**26**
METAL	Zirconium	µg/g	48 [e.]																									

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL MW10	CH2MHILL MW13	CH2MHILL MW19	CH2MHILL MW2	CH2MHILL MW2	CH2MHILL MW3	CH2MHILL MW3	CH2MHILL MW4	CH2MHILL MW5	CH2MHILL MW6	CH2MHILL MW7	CH2MHILL MW7	CH2MHILL MW8	CH2MHILL MW9	DCS BH06-1	DCS BH06-1	DCS BH06-1	DCS BH06-2	DCS BH06-2	DCS BH06-2	DCS BH06-3	DCS BH06-3	DCS BH06-3
					Sample ID	MW10D	MW13i	MW19i	MW2D	MW2S	MW3D	MW3S	MW4I	MW5	MW6D	MW7D	MW7D	MW8D	MW9I	BH06-1 SS1	BH06-1 SS2	BH06-1 SS2B	BH06-2 SS1	BH06-2 SS2	BH06-2 SS3	BH06-3 SS1	BH06-3 SS2	BH06-3 SS3
					Start Depth	3.05	2.4	0.75	3.4	1.5	1.7	0.9	2.74	3.05	3.05	2.44	2.44	3.05	1.83	0	1.2	1.8	0	1.2	2.4	0	1.2	2.4
					End Depth	3.66	3.6	1.5	3.4	1.8	2	1.2	3.05	3.35	3.66	3.05	3.05	3.66	2.44	1.2	2.4	2.4	1.2	2.4	3.7	1.2	2.4	3.7
					Date	15 Aug 2006	19 Oct 2006	27 Oct 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	16 Aug 2006	15 Aug 2006	15 Aug 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																								
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																								
OCP	Hexachloroethane	µg/g	0.01	0.089	22																								
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																											
other SVOC	2-Chloronaphthalene	µg/g																											
other SVOC	2-Hexanone	µg/g					0.02 U	0.26 U																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																											
other SVOC	4-Chlorophenyl Phenylether	µg/g																											
other SVOC	Bis (2-chloroethoxy) methane	µg/g																											
other SVOC	Butyl benzyl phthalate	µg/g																											
other SVOC	Chloroethane	µg/g					0.01 U	0.07 U																					
other SVOC	Chloromethane	µg/g					0.005 U	0.11 U																					
other SVOC	Di-N-Butylphthalate	µg/g																											
other SVOC	Di-n-octyl phthalate	µg/g																											
other SVOC	Isophorone	µg/g																											
other SVOC	Nitrobenzene	µg/g																											
other SVOC	N-Nitrosodi-N-propylamine	µg/g																											
other SVOC	N-Nitrosodiphenylamine	µg/g																											
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																								
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76															0.005 U		0.005 U						**0.79**	
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76															0.005 U		0.005 U						**0.56**	
PAH	Acenaphthene	µg/g	0.072	7.9	560		0.02 U	**3.19**	**59.99**			**0.23**		**0.59**		**16**			**1.4**	0.01 U		**0.01**						**1.5**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		0.01 U	**0.07**	**2.3**			**0.05**		**0.57**		**0.25**			**0.34**	**0.007**		**0.005**						**0.02**	
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.01 >**	**0.49**	**23**			**0.11**		**0.56**		**0.79**			**1.2**	**0.01**		**0.02**						**0.05**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		0.01 U	**0.88**	**8.2**			**0.13**		**0.15**		**0.31**			**1.6**	**0.03**		**0.11**						**0.05**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		0.01 U	**1**	**5.5**			**0.09**		**0.07**		**0.3**			**1.1**	**0.02**		**0.11**						**0.06**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																									
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13		**0.01**	**1.2**	**4.49**			**0.12**		**0.07**		**0.42**			**1.2**	**0.02**		**0.16**						**0.07**	
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		0.01 U	**0.59**	**1.4**			**0.03**		**0.04**		**0.39**			**0.89**	**0.01**		**0.07**						**0.05**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		0.19 U	**0.39**	**1.8**			**0.04**		**0.01**		**0.17**			**0.49**	**0.01**		**0.05**						**0.02**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.01**	**0.89**	**7.4**			**0.14**		**0.22**		**0.41**			**1.7**	**0.02**		**0.09**						**0.04**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		0.01 U	**0.07**	**0.11**			0.01 U		0.01 U		0.01 U			**0.03**	0.01 U		0.01 U						0.01 U	
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.02**	**17**	**22**			**0.42**		**0.28**		**0.92**			**3.59**	**0.06**		**0.31**						**0.16**	
PAH	Fluorene	µg/g	0.19	62	62		0.01 U	**0.41**	**23**			**0.46**		**1.3**		**6.5**			**2**	0.005 U		**0.009**						**0.19**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		0.01 U	**0.44**	**1.1**			**0.02**		**0.02**		**0.26**			**0.55**	0.01 U		**0.07**						**0.04**	
PAH	Naphthalene	µg/g	0.09	0.6	200		0.02 U	**0.79**	**160**			**0.39**		**0.6**		**37**			**2.3**	**0.007**		0.005 U						**0.5**	
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.04**	**1.8**	**72.99**			**0.86**		**3**		**5.79**			**5.9**	**0.01**		**0.15**						**0.25**	
PAH	Pyrene	µg/g	1	78	2600		**0.02**	**2**	**29.99**			**0.44**		**0.66**		**0.95**			**4.19**	**0.07**		**0.21**						**0.16**	
PCB	Aroclor 1016	µg/g																											
PCB	Aroclor 1221	µg/g																											
PCB	Aroclor 1232	µg/g																											
PCB	Aroclor 1242	µg/g																											
PCB	Aroclor 1248	µg/g																											
PCB	Aroclor 1254	µg/g																											
PCB	Aroclor 1260	µg/g																											
PCB	Aroclor 1262	µg/g																											
PCB	Aroclor 1268	µg/g																											
PCB	PCB, Total	µg/g	0.3	0.35		**0.04**	0.04 U			0.3 U	0.3 U		0.04 U		**0.04**			0.04 U		0.01 U	0.01 U		0.01 U					0.01 U
Perchlorate	Perchlorate	µg/g																											
PHC	F1 (C6-C10)	µg/g	25	55	55	4.99 U	4.99 U	**41**	**259.99**	**930**	**2700**	**190**	4.99 U	**1000**	**8.7**		**8.8**	**14**	**270**			9.99 U			**11**		9.99 U		
PHC	F1-BTEX	µg/g	25	55	55																								
PHC	F2 (C10-C16)	µg/g	10	98	230	**17**	**11**	**150**	**4000**	**2599.99**	**7699.99**	**819.99**	9.99 U	**3099.99**	**170**		**239.99**	**319.99**	**6300**			**68**			**48.99**		9.99 U		
PHC	F2-Naphth	µg/g	10	98	230																								
PHC	F3 (C16-C34)	µg/g	240	300		**75.99**	**57.99**	**250**	**5900**	**1600**	**15000**	**1300**	50 U	**600**	**220**		**340**	**2200**	**4300**			**560**			**340**		9.99 U		
PHC	F3-PAH	µg/g	240	300																									
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	50 U	**419.99**	**52.99**	**1700**	**150**	50 U	50 U	50 U		50 U	**130**	50 U			**64.99**			**48**		9.99 U		
PHC	F4G-SG	µg/g	120	2800																									
PHC	**Chrom. to baseline at nC5No**	None																											
PHC	Total Hydrocarbons (C6-C50)	µg/g																											
SVOC	Hexachlorocyclopentadiene	µg/g																											
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		0.004 U	0.03 U																	0.002 U		0.002 U		
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		0.003 U	0.04 U																	0.002 U		0.002 U		
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		0.002 U	0.09 U																	0.002 U		0.002 U		
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			0.03 U																	0.002 U		0.002 U		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		0.005 U	0.04 U																	0.002 U		0.002 U		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		0.003 U																		0.002 U		0.002 U		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		0.004 U	0.03 U																	0.002 U		0.002 U		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		0.004 U	0.04 U																	0.002 U		0.002 U		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		0.006 U	0.02 U																	0.002 U		0.002 U		
VOC	1,2-Dichloroethene (Total)	µg/g																							0.002 U		0.002 U		

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	CH2MHILL MW10	CH2MHILL MW13	CH2MHILL MW19	CH2MHILL MW2	CH2MHILL MW2	CH2MHILL MW3	CH2MHILL MW3	CH2MHILL MW4	CH2MHILL MW5	CH2MHILL MW6	CH2MHILL MW7	CH2MHILL MW7	CH2MHILL MW8	CH2MHILL MW9	DCS BH06-1	DCS BH06-1	DCS BH06-1	DCS BH06-2	DCS BH06-2	DCS BH06-2	DCS BH06-3	DCS BH06-3	DCS BH06-3
						Sample ID	MW10D	MW13i	MW19i	MW2D	MW2S	MW3D	MW3S	MW4I	MW5	MW6D	MW7D	MW7D	MW8D	MW9I	BH06-1 SS1	BH06-1 SS2	BH06-1 SS2B	BH06-2 SS1	BH06-2 SS2	BH06-2 SS3	BH06-3 SS1	BH06-3 SS2	BH06-3 SS3
						Start Depth	3.05	2.4	0.75	3.4	1.5	1.7	0.9	2.74	3.05	3.05	2.44	2.44	3.05	1.83	0	1.2	1.8	0	1.2	2.4	0	1.2	2.4
						End Depth	3.66	3.6	1.5	3.4	1.8	2	1.2	3.05	3.35	3.66	3.05	3.05	3.66	2.44	1.2	2.4	2.4	1.2	2.4	3.7	1.2	2.4	3.7
						Date	15 Aug 2006	19 Oct 2006	27 Oct 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	04 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	15 Aug 2006	16 Aug 2006	15 Aug 2006	15 Aug 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		0.004 U	0.02 U																		0.002 U		0.002 U	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																									
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	2-Butanone	µg/g	0.5	16	230		0.04 U	0.26 U																		**0.03**		0.02 U	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		0.01 U	0.29 U																		0.02 U		0.02 U	
VOC	Acetone	µg/g	0.5	16	16		0.07 U	0.47 U																		**0.19**		0.09 U	
VOC	Benzene	µg/g	0.02	0.21	14	**0.001**	0.004 U	**0.19**	**6.8**	**3.7**	**44**	**0.6**	**0.002**	**0.76**	**0.01**		**0.29**	**0.11**	**0.22**			0.01 U			**0.004**		**0.003**	
VOC	Bromodichloromethane	µg/g	0.05	13	50		0.004 U	0.03 U																		0.002 U		0.002 U	
VOC	Bromoform	µg/g	0.05	0.27	21		0.004 U	0.02 U																		0.002 U		0.002 U	
VOC	Bromomethane	µg/g	0.05	0.05	1.4		0.009 U	0.09 U																		0.003 U		0.003 U	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		0.01 U	0.02 U																		0.002 U		0.002 U	
VOC	Chloroform	µg/g	0.05	0.05	9.5		0.009 U	0.03 U																		0.002 U		0.002 U	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		0.002 U	0.01 U																					
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																								
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.007 U	0.04 U																		0.003 U		0.003 U	
VOC	Ethylbenzene	µg/g	0.05	2	17	0.002 U	0.003 U	**0.38**	**33**	**46**	**71**	**1.1**	0.002 U	**11**	**0.05**		**0.19**	**0.04**	**3.1**			0.01 U			**0.002**		**0.003**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		0.005 U	0.05 U																		0.002 U		0.002 U	
VOC	n-Hexane	µg/g	0.05	2.8	54																								
VOC	Styrene	µg/g	0.05	0.7	66		0.002 U	0.04 U																		0.002 U		0.002 U	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		0.004 U	0.04 U																		0.002 U		0.002 U	
VOC	Toluene	µg/g	0.2	2.3	68	**0.002**	**0.004**	**0.21**	**1.2**	**5.29**	**39**	**1.1**	**0.004**	**1.5**	**0.005**		**0.009**	**0.007**	**1.4**			0.01 U			**0.01**		**0.009**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		0.006 U	0.04 U																		0.002 U		0.002 U	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			0.002 U	0.03 U																		0.002 U		0.002 U	
VOC	Trichloroethylene	µg/g	0.05	0.061	300		0.005 U	0.02 U																		0.002 U		0.002 U	
VOC	Trichlorofluoromethane	µg/g	0.25	4			0.003 U	0.07 U																					
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		0.003 U	0.09 U																		0.002 U		0.002 U	
VOC	Xylene, o	µg/g	0.05	3.1	26	0.002 U	0.002 U	**0.13**					0.002 U		**0.01**		**0.01**	**0.008**				0.01 U			**0.004**		**0.003**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.002 U	**0.002**	**0.42**					**0.004**		**0.01**		**0.01**	**0.01**				0.03 U			**0.01**		**0.009**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.002 U	**0.002**	**0.56**	**21**	**13**	**92**	**3.1**	**0.004**	**9.99**	**0.02**		**0.02**	**0.02**	**4.19**			0.03 U			**0.01**		**0.01**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram
ABN - acid/base/neutral compound
CP - chlorophenol
mbgs – metre below ground surface
mS/cm – milliSiemens per centimetre
NA – No Screening Level Available
OCP - organochlorine pesticide
PAH - polycyclic aromatic hydrocarbon
PCB - polychlorinated biphenyl
PHC - Petroleum Hydrocarbon
SVOC - semi volatile organic compound
U – The analyte was analyzed for, but was not detected bove
VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH06-7	DCS BH06-8	DCS BH06-9	DCS BH06-9	DCS BH06-9	DCS BH-1	DCS BH-102	DCS BH-103	DCS BH-105	DCS BH-108	DCS BH-111	DCS BH-113	DCS BH-121	DCS BH-122	DCS BH-124	DCS BH-133	DCS BH-2	DCS BH-3	DCS BH-3	DCS BH-4	DCS BH-4	DCS BH-5	DCS BH-5
					Sample ID	BH06-7 SS1	BH06-8 SS1	BH06-9 SS1	BH06-9 SS2	BH06-9 SS4	BH-1	BH-102S	BH-103S	BH-105S	BH-108	BH-111S	BH-113S	BH-121S	BH-122	BH-124	BH-133 SS1	BH-2	BH-3 D	BH-3 S	BH-4 D	BH-4 S	BH-5	BH-5
					Start Depth	0	0	0	1.8	4.9	0.3	0.61	0	0	0.61	1.22	1.22	0.61	0.61	0.61	0	0.15	0.6	0.3	1.21	0.15	0.15	0.3
					End Depth	1.2	1.2	1.2	2.4	6.1	0.46	1.22	0.61	0.61	1.22	1.83	1.83	1.22	1.22	1.22	0.61	0.6	1.2	0.46	1.8	0.6	0.46	0.46
					Date	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	03 Feb 2003	27 Sep 1996	27 Sep 1996	26 Sep 1996	25 Sep 1996	20 Nov 1996	25 Sep 1996	19 Nov 1996	19 Nov 1996	19 Nov 1996	19 Dec 1996	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																								
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																								
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																								
ABN	2,4-Dinitrophenol	µg/g	2	38	59																								
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																								
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																								
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																								
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																								
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																								
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																								
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																								
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																								
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																								
ABN	Phenol	µg/g	0.5	9.4	46																								
CHEMISTRY	Ammonia	µg/g																											
CHEMISTRY	Bromide	µg/g																											
CHEMISTRY	Chlorite	µg/g																											
CHEMISTRY	Fluoride	µg/g	110 [c.]																										
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]									**8.75**	**10.59**	**9.39**	**8.73**	**9.4**	**9.59**	**7.9**	**8.31**	**8.5**	**8.72**	**8.88**	**7.23**						
CHEMISTRY	Moisture, percent	%																											
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																										
CHEMISTRY	Nitrite (as N)	µg/g																											
Chemistry	ortho-Phosphate	µg/g																											
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																										
CHEMISTRY	Sulfate	µg/g																											
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																											
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																								
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																								
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																								
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																								
GENCHEM	MOISTURE AT LIQUID LIMIT	%																											
INORGANIC	Aluminum	µg/g	26000 [c.]																										
INORGANIC	Antimony	µg/g	1.3	7.5		**0.39**	**1.7**	**1.6**		0.19 U												1 U	1 U			1 U		**3**
INORGANIC	Arsenic	µg/g	18	18		**1**	**1**	**4.99**		1 U												**9.99**	**37.3**			**8**		**40.5**
INORGANIC	Barium	µg/g	220	390		**28.2**	**19.5**	**70.6**		**61.7**												**31.39**	**12**			**19.8**		**99.6**
INORGANIC	Beryllium	µg/g	2.5	4		0.19 U	0.19 U	0.19 U		**0.3**												**0.19**	**1.2**			**0.19**		**0.3**
INORGANIC	Boron	µg/g	36	120		**0.22**	**0.11**	**1.15**		**0.44**												0.09 U	0.05 U			**0.36**		0.05 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																									
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.3**	**0.5**	**0.39**		0.09 U												**0.39**	0.3 U			0.3 U		**0.79**
INORGANIC	Calcium	µg/g	49000 [c.]																										
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																										
INORGANIC	Chromium	µg/g	70	160		**8.99**	**9.99**	**7**		**11**												**7.19**	**6**			3 U		**8.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																									
INORGANIC	Cobalt	µg/g	22	22		**2.7**	**2.9**	**2.79**		**4.1**												**3.5**	**9.99**			**5.4**		**5.59**
INORGANIC	Copper	µg/g	92	140		**36.8**	**23.39**	**21.8**		**10.2**												**16.89**	**31.8**			**9.39**		**46.39**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	0.09 U	0.09 U			0.09 U		0.09 U
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7								**0.062**	**0.208**	**0.069**	**0.065**	**0.131**	**0.134**	**0.132**	**0.196**	**0.107**	**0.609**								
INORGANIC	Iron	µg/g	34000 [c.]																										
INORGANIC	Lead	µg/g	120	120		**26**	**88**	0 U		**4.99**												**33.79**	**54**			**6.69**		**69.6**
INORGANIC	Magnesium	µg/g	15000 [c.]																										
INORGANIC	Manganese	µg/g	1400 [c.]																										
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	0.04 U	**0.07**	**0.13**		0.04 U												0.04 U	0.04 U			0.04 U		**0.16**
INORGANIC	Molybdenum	µg/g	2	6.9		0.5 U	0.5 U	**0.6**		0.5 U												**0.79**	0.6 U			**0.69**		**2.7**
INORGANIC	Nickel	µg/g	82	100		**5.4**	**5.5**	**7.4**		**8.39**												**11.4**	**14.8**			**11.4**		**16.89**
INORGANIC	Phosphorus	µg/g	1500 [c.]																										
INORGANIC	Potassium	µg/g	4900 [c.]																										
INORGANIC	Selenium	µg/g	1.5	2.4		0.5 U	0.5 U	0.5 U		0.5 U												1 U	1 U			1 U		1 U
INORGANIC	Silver	µg/g	0.5	20		0.19 U	0.19 U	0.19 U		0.19 U												0.69 U	**10.3**			**1.3**		**4**
INORGANIC	Sodium	µg/g	180 [c.]																										
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000								**84180**	**10980**	**101260**	**35380**	**296459.99**	**17080**	**65879.99**	**178120**	**230580**	**703940**	**2.41**	**10248**			**59048**		**26962**
INORGANIC	Strontium	µg/g	77 [c.]																										
INORGANIC	Thallium	µg/g	1	1		0.04 U	0.04 U	**0.09**		0.04 U												1 U	1 U			1 U		1 U
INORGANIC	Titanium	µg/g	4700 [c.]																										
INORGANIC	Uranium (U)	µg/g	2.5	23																									
INORGANIC	Vanadium	µg/g	86	86		**7**	**11**	**8.99**		**14**												**8.7**	0.3 U			**8.2**		**8.1**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																								
INORGANIC	Zinc	µg/g	290	340		**45**	**89**	**97.99**		**23**												**152**	**71.8**			**35.5**		**109**
METAL	Zirconium	µg/g	48 [e.]																										

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH06-7	DCS BH06-8	DCS BH06-9	DCS BH06-9	DCS BH06-9	DCS BH-1	DCS BH-102	DCS BH-103	DCS BH-105	DCS BH-108	DCS BH-111	DCS BH-113	DCS BH-121	DCS BH-122	DCS BH-124	DCS BH-133	DCS BH-2	DCS BH-3	DCS BH-3	DCS BH-4	DCS BH-4	DCS BH-5	DCS BH-5
					Sample ID	BH06-7 SS1	BH06-8 SS1	BH06-9 SS1	BH06-9 SS2	BH06-9 SS4	BH-1	BH-102S	BH-103S	BH-105S	BH-108	BH-111S	BH-113S	BH-121S	BH-122	BH-124	BH-133 SS1	BH-2	BH-3 D	BH-3 S	BH-4 D	BH-4 S	BH-5	BH-5
					Start Depth	0	0	0	1.8	4.9	0.3	0.61	0	0	0.61	1.22	1.22	0.61	0.61	0.61	0	0.15	0.6	0.3	1.21	0.15	0.15	0.3
					End Depth	1.2	1.2	1.2	2.4	6.1	0.46	1.22	0.61	0.61	1.22	1.83	1.83	1.22	1.22	1.22	0.61	0.6	1.2	0.46	1.8	0.6	0.46	0.46
					Date	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	03 Feb 2003	27 Sep 1996	27 Sep 1996	26 Sep 1996	25 Sep 1996	20 Nov 1996	25 Sep 1996	19 Nov 1996	19 Nov 1996	19 Nov 1996	19 Dec 1996	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																							
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																							
OCP	Hexachloroethane	µg/g	0.01	0.089	22																							
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																										
other SVOC	2-Chloronaphthalene	µg/g																										
other SVOC	2-Hexanone	µg/g																										
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																										
other SVOC	4-Chlorophenyl Phenylether	µg/g																										
other SVOC	Bis (2-chloroethoxy) methane	µg/g																										
other SVOC	Butyl benzyl phthalate	µg/g																										
other SVOC	Chloroethane	µg/g																										
other SVOC	Chloromethane	µg/g																										
other SVOC	Di-N-Butylphthalate	µg/g																										
other SVOC	Di-n-octyl phthalate	µg/g																										
other SVOC	Isophorone	µg/g																										
other SVOC	Nitrobenzene	µg/g																										
other SVOC	N-Nitrosodi-N-propylamine	µg/g																										
other SVOC	N-Nitrosodiphenylamine	µg/g																										
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																							
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.3 U	0.04 U	**0.12**		0.005 U																		
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.3 U	0.04 U	**0.15**		0.005 U																		
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.5 U	0.09 U	**0.21**		0.01 U	0.1 U													0.1 U			0.1 U	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.3 U	0.04 U	**0.02**		0.005 U	**0.18**													**0.22**			**0.15**	
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.5**	**0.09**	**0.36**		0.005 U	**0.17**													**0.35**			**0.17**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**1.5**	**0.39**	**0.89**		0.01 U	**0.8**													**1.07**			**0.68**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**1.7**	**0.28**	**0.95**		0.005 U	**0.84**													**0.81**			**0.32**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																								
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**2.3**	**0.36**	**1.3**		0.005 U	**0.9**													**0.88**			**0.62**	
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**1**	**0.19**	**0.63**		0.01 U	**0.69**													**1.04**			**0.51**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.79**	**0.09**	**0.47**		0.01 U	**0.51**													**0.41**			**0.31**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.89**	**0.19**	**0.86**		0.01 U	**0.78**													**1.02**			**0.63**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	1 U	0.19 U	**0.16**		0.01 U	**0.18**													0.02 U			0.02 U	
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**2.79**	**0.66**	**2.4**		0.005 U	**1.2**													**1.93**			**0.82**	
PAH	Fluorene	µg/g	0.19	62	62	0.3 U	0.04 U	**0.14**		0.005 U	**0.05**													**0.07**			0.05 U	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**1**	**0.19**	**0.59**		0.01 U	**0.91**													**1.01**			**0.32**	
PAH	Naphthalene	µg/g	0.09	0.6	200	0.3 U	0.04 U	**0.12**		0.005 U	**0.38**													**0.67**			**0.78**	
PAH	Phenanthrene	µg/g	0.69	6.2	270	**1.4**	**0.34**	**1.5**		0.005 U	**0.86**													**1.52**			**0.94**	
PAH	Pyrene	µg/g	1	78	2600	**2.4**	**0.42**	**1.5**		0.005 U	**1.29**													**2.08**			**0.9**	
PCB	Aroclor 1016	µg/g																										
PCB	Aroclor 1221	µg/g																										
PCB	Aroclor 1232	µg/g																										
PCB	Aroclor 1242	µg/g																										
PCB	Aroclor 1248	µg/g																										
PCB	Aroclor 1254	µg/g																										
PCB	Aroclor 1260	µg/g																										
PCB	Aroclor 1262	µg/g																										
PCB	Aroclor 1268	µg/g																										
PCB	PCB, Total	µg/g	0.3	0.35		**0.6**	**0.5**	**0.3**		0.01 U																		
Perchlorate	Perchlorate	µg/g																										
PHC	F1 (C6-C10)	µg/g	25	55	55				9.99 U																			
PHC	F1-BTEX	µg/g	25	55	55																							
PHC	F2 (C10-C16)	µg/g	10	98	230				**17**																			
PHC	F2-Naphth	µg/g	10	98	230																							
PHC	F3 (C16-C34)	µg/g	240	300					**160**																			
PHC	F3-PAH	µg/g	240	300																								
PHC	F4 (C34-C50)	µg/g	120	2800					**25**																			
PHC	F4G-SG	µg/g	120	2800																								
PHC	**Chrom. to baseline at nC5No**	None																										
PHC	Total Hydrocarbons (C6-C50)	µg/g																										
SVOC	Hexachlorocyclopentadiene	µg/g																										
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37				0.002 U	0.002 U																		
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8				0.002 U	0.002 U																		
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48				0.002 U	0.002 U																		
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120				0.002 U	0.002 U																		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600				0.002 U	0.002 U																		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11				0.002 U	0.002 U																		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86				0.002 U	0.002 U																		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60				0.002 U	0.002 U																		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180				0.002 U	0.002 U																		
VOC	1,2-Dichloroethene (Total)	µg/g								0.002 U																		

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH06-7	DCS BH06-8	DCS BH06-9	DCS BH06-9	DCS BH06-9	DCS BH-1	DCS BH-102	DCS BH-103	DCS BH-105	DCS BH-108	DCS BH-111	DCS BH-113	DCS BH-121	DCS BH-122	DCS BH-124	DCS BH-133	DCS BH-2	DCS BH-3	DCS BH-3	DCS BH-4	DCS BH-4	DCS BH-5	DCS BH-5
					Sample ID	BH06-7 SS1	BH06-8 SS1	BH06-9 SS1	BH06-9 SS2	BH06-9 SS4	BH-1	BH-102S	BH-103S	BH-105S	BH-108	BH-111S	BH-113S	BH-121S	BH-122	BH-124	BH-133 SS1	BH-2	BH-3 D	BH-3 S	BH-4 D	BH-4 S	BH-5	BH-5
					Start Depth	0	0	0	1.8	4.9	0.3	0.61	0	0	0.61	1.22	1.22	0.61	0.61	0.61	0	0.15	0.6	0.3	1.21	0.15	0.15	0.3
					End Depth	1.2	1.2	1.2	2.4	6.1	0.46	1.22	0.61	0.61	1.22	1.83	1.83	1.22	1.22	1.22	0.61	0.6	1.2	0.46	1.8	0.6	0.46	0.46
					Date	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	31 Oct 2006	03 Feb 2003	27 Sep 1996	27 Sep 1996	26 Sep 1996	25 Sep 1996	20 Nov 1996	25 Sep 1996	19 Nov 1996	19 Nov 1996	19 Nov 1996	19 Dec 1996	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003	03 Feb 2003
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76				0.002 U	0.002 U																		
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59				0.002 U	0.002 U																		
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																								
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59				0.002 U	0.002 U																		
VOC	2-Butanone	µg/g	0.5	16	230				**0.02**	0.02 U																		
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150				0.02 U	0.02 U																		
VOC	Acetone	µg/g	0.5	16	16				**0.09**	0.09 U																		
VOC	Benzene	µg/g	0.02	0.21	14				**0.003**	**0.006**															0.005 U			
VOC	Bromodichloromethane	µg/g	0.05	13	50				0.002 U	0.002 U																		
VOC	Bromoform	µg/g	0.05	0.27	21				0.002 U	0.002 U																		
VOC	Bromomethane	µg/g	0.05	0.05	1.4				0.003 U	0.003 U																		
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3				0.002 U	0.002 U																		
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4				0.002 U	0.002 U																		
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48				0.002 U	0.002 U																		
VOC	Chloroform	µg/g	0.05	0.05	9.5				0.002 U	0.002 U																		
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130																							
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05					0.002 U	0.002 U																		
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																							
VOC	Dichloromethane	µg/g	0.05	0.1	7.4				0.003 U	0.003 U																		
VOC	Ethylbenzene	µg/g	0.05	2	17				**0.002**	**0.003**															0.005 U			
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220				0.002 U	0.002 U																		
VOC	n-Hexane	µg/g	0.05	2.8	54																							
VOC	Styrene	µg/g	0.05	0.7	66				0.002 U	0.002 U																		
VOC	Tetrachloroethene	µg/g	0.05	0.28	18				0.002 U	0.002 U																		
VOC	Toluene	µg/g	0.2	2.3	68				**0.01**	**0.01**															0.005 U			
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220				0.002 U	0.002 U																		
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05					0.002 U	0.002 U																		
VOC	Trichloroethylene	µg/g	0.05	0.061	300				0.002 U	0.002 U																		
VOC	Trichlorofluoromethane	µg/g	0.25	4																								
VOC	Vinyl Chloride	µg/g	0.02	0.02	270				0.002 U	0.002 U																		
VOC	Xylene, o	µg/g	0.05	3.1	26				**0.003**	**0.003**															0.005 U			
VOC	Xylenes, m & p	µg/g	0.05	3.1	26				**0.01**	**0.01**															0.005 U			
VOC	Xylenes, Total	µg/g	0.05	3.1	26				**0.01**	**0.01**																		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH-5	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)
					Sample ID	BH-5	BH14-1/1	BH14-1/3B	BH14-1/5	BH14-1 SA1	BH14-1 SA2	BH14-1 SA3	BH14-1 SA4	BH14-1 SA5	BH14-2/1	BH14-2/2	BH14-2/5	BH14-2 SA1A	BH14-2 SA2	BH14-2 SA3A	BH14-3 SA1	BH14-3 SA2B	BH14-3 SA4A	BH14-3 SA4B	BH14-3 SA1	BH14-3 SA2	BH14-3 SA3
					Start Depth	2.44	0.3	4	6.1	0	1.5	3.1	4.6	6.1	0.3	2.1	6.1	0.1	1.5	3.1	0.5	2.7	4.6	5.2	0.1	1.5	3.1
					End Depth	3.05	0.6	4.6	7.6	1.5	3.1	4.6	6.1	7.6	1.5	2.7	7.6	0.5	3.1	4	1.5	3	5.2	6.1	0.5	3.1	4.6
					Date	03 Feb 2003	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																0.02 U		0.01 U			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																						
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																						
ABN	2,4-Dinitrophenol	µg/g	2	38	59																						
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																						
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																						
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																						
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																						
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																						
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																						
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																						
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																						
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																						
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																						
ABN	Phenol	µg/g	0.5	9.4	46																						
CHEMISTRY	Ammonia	µg/g																									
CHEMISTRY	Bromide	µg/g																									
CHEMISTRY	Chlorite	µg/g																									
CHEMISTRY	Fluoride	µg/g	110 [c.]																								
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]			0.01 U	**11**		**7.48**	**7.34**				**7.65**	**7.79**		**7.42**	**7.88**			**7.67**		**6.92**		**7.38**		
CHEMISTRY	Moisture, percent	%					**8.89**	**65**	**19**	**29**	**38**	**50**	**77**	**14**	**14**	**27**	**19**	**13**	**21**	**40**	**13**		**31**		**13**	**12**	**52**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																								
CHEMISTRY	Nitrite (as N)	µg/g																									
Chemistry	ortho-Phosphate	µg/g																									
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																								
CHEMISTRY	Sulfate	µg/g																									
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																									
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																						
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																						
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																						
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																						
GENCHEM	MOISTURE AT LIQUID LIMIT	%																									
INORGANIC	Aluminum	µg/g	26000 [c.]																								
INORGANIC	Antimony	µg/g	1.3	7.5			**0.37**		0.2 U	**1.8**				0.2 U	0.2 U		0.2 U	**2.09**			0.2 U		0.2 U		**6.9**		
INORGANIC	Arsenic	µg/g	18	18			**1.7**		1 U	**6.69**				1 U	**1**		**1.6**	**6.09**			1 U		1 U		**20**		
INORGANIC	Barium	µg/g	220	390			**20**		**7.19**	**70**				**6.8**	**9.3**		**9.8**	**61**			**13**		**43**		**240**		
INORGANIC	Beryllium	µg/g	2.5	4			0.2 U		0.2 U	**0.5**				0.2 U	0.2 U		0.2 U	**0.22**			0.2 U		0.2 U		**1.1**		
INORGANIC	Boron	µg/g	36	120			5 U		5 U	**14**				5 U	5 U		5 U	**5.09**			5 U		5 U		**12**		
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																							
INORGANIC	Cadmium	µg/g	1.2	1.2			0.1 U		0.1 U	**0.15**				0.1 U	0.1 U		0.1 U	**0.56**			0.1 U		0.1 U		**1.2**		
INORGANIC	Calcium	µg/g	49000 [c.]																								
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																								
INORGANIC	Chromium	µg/g	70	160			**5.3**		**2.7**	**18**				**3.4**	**4.59**		**3.3**	**13**			**3.09**		**8.39**		**27**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																							
INORGANIC	Cobalt	µg/g	22	22			**1.8**		**1.2**	**7.9**				**1.3**	**2.09**		**2.3**	**3.09**			**1.4**		**2.8**		**9.39**		
INORGANIC	Copper	µg/g	92	140			**29**		**1.7**	**36**				**2.09**	**3.3**		**3.8**	**28**			**3**		**5.5**		**200**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		0.01 U		0.01 U	**0.03**				0.01 U	0.01 U		0.01 U	**0.11**			0.01 U		**0.02**		**0.07**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**0.4**		**0.14**	**0.91**				**0.11**	**0.62**		**0.15**	**0.83**			**0.55**		**0.42**		**0.23**		
INORGANIC	Iron	µg/g	34000 [c.]																								
INORGANIC	Lead	µg/g	120	120			**16**		**2.2**	**72**				**3.8**	**2.7**		**2.9**	**170**			**3.9**		**2.7**		**530**		
INORGANIC	Magnesium	µg/g	15000 [c.]																								
INORGANIC	Manganese	µg/g	1400 [c.]																								
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		0.05 U		0.05 U	**0.43**				0.05 U	0.05 U		0.05 U	**0.17**			0.05 U		0.05 U		**0.56**		
INORGANIC	Molybdenum	µg/g	2	6.9			0.5 U		0.5 U	**1.5**				0.5 U	0.5 U		0.5 U	**1.4**			0.5 U		0.5 U		**2.9**		
INORGANIC	Nickel	µg/g	82	100			**4.9**		**2.7**	**18**				**3.09**	**3.7**		**5.09**	**12**			**3.4**		**5.9**		**27**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																								
INORGANIC	Potassium	µg/g	4900 [c.]																								
INORGANIC	Selenium	µg/g	1.5	2.4			0.5 U		0.5 U	**1.8**				0.5 U	0.5 U		0.5 U	0.5 U			0.5 U		0.5 U		**1.4**		
INORGANIC	Silver	µg/g	0.5	20			0.2 U		0.2 U	0.2 U				0.2 U	0.2 U		0.2 U	0.2 U			0.2 U		0.2 U		**0.52**		
INORGANIC	Sodium	µg/g	180 [c.]																								
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**1.9**		**0.76**	**5.3**				**0.5**	**2.09**		**0.44**	**4.69**			**6.3**		**0.8**		**0.23**		
INORGANIC	Strontium	µg/g	77 [c.]																								
INORGANIC	Thallium	µg/g	1	1			0.05 U		0.05 U	**0.2**				0.05 U	0.05 U		0.05 U	**0.09**			0.05 U		0.05 U		**0.3**		
INORGANIC	Titanium	µg/g	4700 [c.]																								
INORGANIC	Uranium (U)	µg/g	2.5	23			**0.23**		**0.16**	**0.43**				**0.25**	**0.2**		**0.2**	**0.38**			**0.17**		**0.31**		**0.63**		
INORGANIC	Vanadium	µg/g	86	86			**9.39**		5 U	**25**				5 U	**9**		**5.3**	**12**			**5.19**		**14**		**32**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																						
INORGANIC	Zinc	µg/g	290	340			**23**		**8**	**110**				**9.3**	**9.3**		**12**	**100**			**10**		**15**		**440**		
METAL	Zirconium	µg/g	48 [e.]																								

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH-5	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)
					Sample ID	BH-5	BH14-1/1	BH14-1/3B	BH14-1/5	BH14-1 SA1	BH14-1 SA2	BH14-1 SA3	BH14-1 SA4	BH14-1 SA5	BH14-2/1	BH14-2/2	BH14-2/5	BH14-2 SA1A	BH14-2 SA2	BH14-2 SA3A	BH14-3 SA1	BH14-3 SA2B	BH14-3 SA4A	BH14-3 SA4B	BH14-3 SA1	BH14-3 SA2	BH14-3 SA3
					Start Depth	2.44	0.3	4	6.1	0	1.5	3.1	4.6	6.1	0.3	2.1	6.1	0.1	1.5	3.1	0.5	2.7	4.6	5.2	0.1	1.5	3.1
					End Depth	3.05	0.6	4.6	7.6	1.5	3.1	4.6	6.1	7.6	1.5	2.7	7.6	0.5	3.1	4	1.5	3	5.2	6.1	0.5	3.1	4.6
					Date	03 Feb 2003	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																								
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																								
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																								
OCP	Hexachloroethane	µg/g	0.01	0.089	22																								
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																											
other SVOC	2-Chloronaphthalene	µg/g																											
other SVOC	2-Hexanone	µg/g																											
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																											
other SVOC	4-Chlorophenyl Phenylether	µg/g																											
other SVOC	Bis (2-chloroethoxy) methane	µg/g																											
other SVOC	Butyl benzyl phthalate	µg/g																											
other SVOC	Chloroethane	µg/g																											
other SVOC	Chloromethane	µg/g																											
other SVOC	Di-N-Butylphthalate	µg/g																											
other SVOC	Di-n-octyl phthalate	µg/g																											
other SVOC	Isophorone	µg/g																											
other SVOC	Nitrobenzene	µg/g																											
other SVOC	N-Nitrosodi-N-propylamine	µg/g																											
other SVOC	N-Nitrosodiphenylamine	µg/g																											
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																								
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**260**	**5.8**			**560**	**5100**			**0.05**	0.0071 U		**0.38**	**200**		**39**		0.0071 U		**39**	**13**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**150**	**2.8**			**340**	**3100**			**0.0099**	0.005 U		**0.2**	**130**		**20**		0.005 U		**3.7**	**5.19**
PAH	Acenaphthene	µg/g	0.072	7.9	560			**180**	**4.5**			**230**	**2100**			**0.2**	0.005 U		**0.34**	**91**		**13**		0.005 U		**3.4**	**3.59**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**12**	**0.44**			**19**	**280**			**0.01**	0.005 U		**0.04**	**10**		**0.03**		0.005 U		**0.54**	**0.44**
PAH	Anthracene	µg/g	0.22	0.67	0.67			**140**	**3**			**95**	**970**			**0.13**	0.005 U		**0.15**	**39**		**0.04**		0.005 U		**0.94**	**1.7**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**79**	**1.3**			**43**	**460**			**0.14**	0.005 U		**0.23**	**19**		**0.04**		0.005 U		**0.2**	**1**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**52**	**0.86**			**37**	**330**			**0.12**	0.005 U		**0.1**	**14**		**0.05**		0.005 U		**0.14**	**0.69**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**44**	**0.73**			**27**	**260**			**0.12**	0.005 U		**0.25**	**11**		**0.07**		0.005 U		**0.17**	**0.63**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																								
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**3**	**0.31**			**13**	**130**			**0.07**	0.005 U		**0.1**	**5.69**		**0.07**		0.005 U		0.1 U	**0.31**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**15**	**0.22**			**11**	**93**			**0.03**	0.005 U		**0.07**	**4**		**0.02**		0.005 U		0.1 U	**0.2**
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**4**	**1.1**			**35**	**390**			**0.13**	0.005 U		**0.25**	**16**		**0.05**		0.005 U		**0.18**	**0.88**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**5.4**	**0.06**			**3**	**35**			**0.01**	0.005 U		**0.02**	**1.2**		0.01 U		0.005 U		0.1 U	**0.07**
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**150**	**2.5**			**98**	**1000**			**0.31**	0.005 U		**0.79**	**52**		**0.19**		0.005 U		**0.83**	**2.2**
PAH	Fluorene	µg/g	0.19	62	62			**92**	**2.9**			**110**	**1100**			**0.09**	0.005 U		**0.33**	**42**		**2.09**		0.005 U		**4.4**	**2.3**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**20**	**0.25**			**12**	**110**			**0.06**	0.005 U		**0.12**	**5.19**		**0.05**		0.005 U		0.1 U	**0.3**
PAH	Naphthalene	µg/g	0.09	0.6	200			**260**	**5.4**			**930**	**8700**			**0.02**	0.005 U		**0.94**	**570**		**31**		0.005 U		5 U	**14**
PAH	Phenanthrene	µg/g	0.69	6.2	270			**390**	**9.39**			**310**	**3100**			**0.43**	0.005 U		**0.52**	**140**		**0.38**		0.005 U		**8.39**	**6.5**
PAH	Pyrene	µg/g	1	78	2600			**210**	**3.7**			**130**	**1400**			**0.41**	0.005 U		**0.63**	**66**		**0.16**		0.005 U		**0.87**	**2.59**
PCB	Aroclor 1016	µg/g																											
PCB	Aroclor 1221	µg/g																											
PCB	Aroclor 1232	µg/g																											
PCB	Aroclor 1242	µg/g																											
PCB	Aroclor 1248	µg/g																											
PCB	Aroclor 1254	µg/g																											
PCB	Aroclor 1260	µg/g																											
PCB	Aroclor 1262	µg/g																											
PCB	Aroclor 1268	µg/g																											
PCB	PCB, Total	µg/g	0.3	0.35							0.02 U											0.02 U		0.01 U					
Perchlorate	Perchlorate	µg/g																											
PHC	F1 (C6-C10)	µg/g	25	55	55			**170**	10 U			**1400**	**1600**			10 U	10 U		**22**	**470**		30 U		10 U		**1200**	**86**
PHC	F1-BTEX	µg/g	25	55	55																								
PHC	F2 (C10-C16)	µg/g	10	98	230			**430**	**35**			**10000**	**51000**			**18**	10 U		**110**	**1900**		**110**		10 U		**1700**	**660**
PHC	F2-Naphth	µg/g	10	98	230																								
PHC	F3 (C16-C34)	µg/g	240	300				**260**	50 U			**10000**	**48000**			**91**	50 U		**190**	**1500**		150 U		50 U		**800**	**620**
PHC	F3-PAH	µg/g	240	300																									
PHC	F4 (C34-C50)	µg/g	120	2800				150 U	50 U			**990**	**4400**			50 U	50 U		**480**	**140**		150 U		50 U		50 U	100 U
PHC	F4G-SG	µg/g	120	2800																									
PHC	**Chrom. to baseline at nC5No**	None																											
PHC	Total Hydrocarbons (C6-C50)	µg/g																											
SVOC	Hexachlorocyclopentadiene	µg/g																											
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		20 U		0.05 U		0.05 U	0.15 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.2 U	0.15 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120							0.1 U	0.34 U						0.05 U	0.1 U						0.05 U	0.15 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,2-Dichloroethene (Total)	µg/g																											

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH-5	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (130)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-1 (54)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (130)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-2 (54)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (130)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)	GAL - BH 14-3 (54)
					Sample ID	BH-5	BH14-1/1	BH14-1/3B	BH14-1/5	BH14-1 SA1	BH14-1 SA2	BH14-1 SA3	BH14-1 SA4	BH14-1 SA5	BH14-2/1	BH14-2/2	BH14-2/5	BH14-2 SA1A	BH14-2 SA2	BH14-2 SA3A	BH14-3 SA1	BH14-3 SA2B	BH14-3 SA4A	BH14-3 SA4B	BH14-3 SA1	BH14-3 SA2	BH14-3 SA3
					Start Depth	2.44	0.3	4	6.1	0	1.5	3.1	4.6	6.1	0.3	2.1	6.1	0.1	1.5	3.1	0.5	2.7	4.6	5.2	0.1	1.5	3.1
					End Depth	3.05	0.6	4.6	7.6	1.5	3.1	4.6	6.1	7.6	1.5	2.7	7.6	0.5	3.1	4	1.5	3	5.2	6.1	0.5	3.1	4.6
					Date	03 Feb 2003	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	22 Aug 2014	22 Aug 2014	22 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			20 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																								
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	2-Butanone	µg/g	0.5	16	230			2 U	0.5 U			3.5 U	0.5 U			0.5 U	0.5 U		1 U	0.5 U		2 U		0.5 U		1.5 U	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			2 U	0.5 U			1 U	3.5 U			0.5 U	0.5 U		0.5 U	1 U		2 U		0.5 U		0.5 U	1.5 U
VOC	Acetone	µg/g	0.5	16	16			2 U	0.5 U			**1**	3.5 U			0.5 U	0.5 U		0.5 U	1 U		2 U		0.5 U		**0.67**	1.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.005 U		**2.7**	**1.9**			**25**	**460**			0.02 U	0.02 U		**0.19**	**98**		0.07 U		0.02 U		**0.11**	**0.57**
VOC	Bromodichloromethane	µg/g	0.05	13	50			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Bromoform	µg/g	0.05	0.27	21			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Chloroform	µg/g	0.05	0.05	9.5			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				0.12 U	0.02 U			0.05 U	0.2 U			0.02 U	0.02 U		0.02 U	0.05 U		0.12 U		0.02 U		0.02 U	0.09 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.005 U		**30**	**1.8**			**280**	**770**			0.02 U	0.02 U		**0.13**	**120**		0.07 U		0.02 U		**1.9**	**15**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	n-Hexane	µg/g	0.05	2.8	54			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		**0.08**	0.1 U		0.2 U		0.05 U		**0.63**	**0.36**
VOC	Styrene	µg/g	0.05	0.7	66			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Toluene	µg/g	0.2	2.3	68	0.005 U		**0.38**	0.02 U			**7.4**	**650**			**0.04**	0.02 U		**0.07**	**100**		0.07 U		0.02 U		**0.43**	**0.41**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				0.16 U	0.03 U			0.07 U	0.28 U			0.03 U	0.03 U		0.03 U	0.07 U		0.16 U		0.03 U		0.03 U	0.12 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300			0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Trichlorofluoromethane	µg/g	0.25	4				0.2 U	0.05 U			0.1 U	0.34 U			0.05 U	0.05 U		0.05 U	0.1 U		0.2 U		0.05 U		0.05 U	0.15 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			0.07 U	0.02 U			0.03 U	0.14 U			0.02 U	0.02 U		0.02 U	0.03 U		0.07 U		0.02 U		0.02 U	
VOC	Xylene, o	µg/g	0.05	3.1	26	0.005 U		**11**	**0.36**			**81**	**230**			0.02 U	0.02 U		**0.03**	**29**		**0.27**		0.02 U		**0.55**	**2.9**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.005 U		**16**	**0.09**			**120**	**480**			**0.02**	0.02 U		**0.1**	**64**		**0.18**		0.02 U		**1.9**	**0.97**
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**27**	**0.44**			**210**	**710**			**0.02**	0.02 U		**0.13**	**94**		**0.44**		0.02 U		**2.4**	**3.8**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GOLDER BH-1 - 91	GOLDER BH10	GOLDER BH-10 - 91	GOLDER BH-11 - 91	GOLDER BH12
					Sample ID	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA5	BH14-5 SA1	BH14-5 SA2	BH14-5 SA3	BH14-5 SA4	BH14-6 SA1	BH14-6 SA2	BH14-6 SA3A	BH14-7 SA1	BH14-7 SA2	BH14-7 SA4B	BH-1 - 91 S	BH10	BH-10 - 91	BH-11 - 91	BH12
					Start Depth	0	1.5	4.6	0	1.5	6.1	7.6	0	1.5	3.7	4.6	0	1.5	3	0	1.5	5.5	0.15	1.22	0.75	0.75	2.44
					End Depth	1.5	3	6.1	1.5	3.1	7.6	9.2	1.5	3	4.6	6.1	1.5	3	3.8	1.5	3	6.1	0.75	2.44	1.4	1.4	3.66
					Date	21 Aug 2014	21 Aug 2014	21 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	30 Sep 1991	12 May 2006	02 Oct 1991	30 Sep 1991	15 May 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																						
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190		0.02 U	0.01 U						0.01 U		0.01 U		0.01 U	0.02 U		0.02 U	0.01 U		1 U			1 U
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			2 U			2 U
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			1 U			1 U
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			2 U			2 U
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			1 U			1 U
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																						
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			1 U			1 U
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			4.99 U			4.99 U
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			2 U			2 U
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			2 U			2 U
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			1 U			1 U
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			4.99 U			4.99 U
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			2 U			2 U
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			2 U			2 U
ABN	Phenol	µg/g	0.5	9.4	46																			2 U			2 U
CHEMISTRY	Ammonia	µg/g																									**11.8**
CHEMISTRY	Bromide	µg/g																									
CHEMISTRY	Chlorite	µg/g																									
CHEMISTRY	Fluoride	µg/g	110 [c.]																								
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.65**	**7.04**		**7.65**	**7.07**			**8.07**		**7**		**7.4**		**6.73**	**7.94**		**6.98**		**7.53**			
CHEMISTRY	Moisture, percent	%				**3.59**	**32**	**18**	**10**	**47**	**18**	**19**	**16**	**28**	**25**	**27**	**8.6**	**26**	**40**	**14**	**40**						
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																								2 U
CHEMISTRY	Nitrite (as N)	µg/g																									0.5 U
Chemistry	ortho-Phosphate	µg/g																									
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																								
CHEMISTRY	Sulfate	µg/g																									
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																									**1630**
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			1 U			1 U
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			1 U			1 U
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			1 U			1 U
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			2 U			2 U
GENCHEM	MOISTURE AT LIQUID LIMIT	%																									
INORGANIC	Aluminum	µg/g	26000 [c.]																				1390		2500	3960	
INORGANIC	Antimony	µg/g	1.3	7.5		**2.5**	0.2 U		**0.79**	**4.9**			**2.8**		0.2 U		**1**		**0.2**	0.2 U		0.2 U		**1**			**1**
INORGANIC	Arsenic	µg/g	18	18		**2.2**	**1.8**		**4.59**	**18**			**8.89**		**1.1**		**1.3**		**14**	1 U		**1.1**	**3.59**	**12**	**1.1**	**1.6**	**86**
INORGANIC	Barium	µg/g	220	390		**29**	**51**		**100**	**290**			**80**		**38**		**12**		**110**	**7.9**		**37**	**58.89**	**150**	**16.89**	**37**	**370**
INORGANIC	Beryllium	µg/g	2.5	4		**0.34**	**0.28**		**0.61**	**0.92**			**0.31**		0.2 U		0.2 U		**0.61**	0.2 U		**0.22**	**0.28**	0.5 U	**0.19**	**0.34**	**1.6**
INORGANIC	Boron	µg/g	36	120		**5.09**	**7.09**		**8.5**	**11**			5 U		5 U		5 U		**10**	5 U		5 U		**1.15**			**1.07**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																							
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.36**	0.1 U		**0.16**	**2.59**			0.47 U		0.1 U		**0.5**		**0.12**	0.1 U		0.1 U	0.3 U	**1.3**	**0.3**	0.3 U	**6.3**
INORGANIC	Calcium	µg/g	49000 [c.]																				**144000**		**44500**	**51900**	
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																								
INORGANIC	Chromium	µg/g	70	160		**16**	**12**		**27**	**30**			**9**		**8.39**		**15**		**27**	**3.5**		**8.8**	**8.6**	**28**	**6.89**	**10.1**	25 U
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																							
INORGANIC	Cobalt	µg/g	22	22		**2.2**	**4.9**		**11**	**11**			**3.3**		**3**		**2.2**		**8.8**	**1.2**		**3.09**	2 U	**5.7**	2 U	2 U	**15**
INORGANIC	Copper	µg/g	92	140		**110**	**9.6**		**26**	**100**			**22**		**7.69**		**69**		**24**	**3.3**		**7.3**	**25.59**	**140**	**6.39**	**16.4**	**1200**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.05**		0.01 U	**0.22**			**0.02**		**0.02**		**0.02**		**0.05**	0.01 U		**0.05**					
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.38**	**0.47**		**0.22**	**1.9**			**0.4**		**0.21**		**0.26**		**1.1**	**0.69**		**0.5**		**0.33**			
INORGANIC	Iron	µg/g	34000 [c.]																				**6570**		**5659.99**	**7500**	
INORGANIC	Lead	µg/g	120	120		**130**	**6**		**56**	**490**			**140**		**2.8**		**53**		**15**	**4.09**		**4**	**93**	**540**	**7**	**26**	**759.99**
INORGANIC	Magnesium	µg/g	15000 [c.]																				**71599.99**		**4079.99**	**6900**	
INORGANIC	Manganese	µg/g	1400 [c.]																				**333**		**127**	**194**	
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.11**	0.05 U		0.05 U	**9.1**			**0.12**		0.05 U		**0.15**		**0.09**	0.05 U		0.05 U	**0.07**	**0.82**	**0.05**	**0.1**	**1.49**
INORGANIC	Molybdenum	µg/g	2	6.9		**1.8**	0.5 U		**0.6**	**4.19**			**1.5**		0.5 U		2.4		**1.1**	0.5 U		0.5 U	3 U	**8.2**	3 U	3 U	**7.19**
INORGANIC	Nickel	µg/g	82	100		**12**	**10**		**24**	**31**			**8.69**		**5.9**		**17**		**21**	**3.2**		**7.3**	2 U	**14**	2 U	**4**	**239.99**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				20 U		**479.99**	**370**	**980**
INORGANIC	Potassium	µg/g	4900 [c.]																				**230**		**270**	**519.99**	**690**
INORGANIC	Selenium	µg/g	1.5	2.4		0.5 U	0.5 U		0.5 U	**2**			**0.7**		0.5 U		0.5 U		0.5 U	0.5 U		0.5 U	0.19 U	**2**	0.19 U	0.19 U	**1**
INORGANIC	Silver	µg/g	0.5	20		**2.09**	0.2 U		0.2 U	**0.44**			0.2 U		0.2 U		**0.57**		0.2 U	0.2 U		0.2 U	0.19 U	**0.6**	0.19 U	0.19 U	**2.7**
INORGANIC	Sodium	µg/g	180 [c.]																				**150**		**220**	**170**	
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.6**	**3**		**0.33**	**0.56**			**4.5**		**0.28**		**0.37**		**0.95**	**14**		**1.2**		**0.73**			
INORGANIC	Strontium	µg/g	77 [c.]																				**56.8**		**67.29**	**77.39**	
INORGANIC	Thallium	µg/g	1	1		0.05 U	**0.06**		**0.17**	**0.28**			**0.17**		0.05 U		0.05 U		**0.17**	0.05 U		**0.05**	2 U	**1**	2 U	2 U	1 U
INORGANIC	Titanium	µg/g	4700 [c.]																				**49.6**		**89.69**	**146**	
INORGANIC	Uranium (U)	µg/g	2.5	23		**0.27**	**0.34**		**0.6**	**0.87**			**0.28**		**0.27**		**0.2**		**0.66**	**0.19**		**0.3**					
INORGANIC	Vanadium	µg/g	86	86		**8.1**	**16**		**32**	**30**			**16**		**13**		**6.5**		**34**	**5.9**		**13**	**10.7**	**22**	**10.5**	**14**	**43**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																						
INORGANIC	Zinc	µg/g	290	340		**100**	**26**		**67**	**780**			**100**		**16**		**110**		**54**	**10**		**19**	**143**	**330**	**16.4**	**42.9**	**1500**
METAL	Zirconium	µg/g	48 [e.]																				**4.99**		**4**	**4.99**	

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GOLDER BH-1 - 91	GOLDER BH10	GOLDER BH-10 - 91	GOLDER BH-11 - 91	GOLDER BH12
					Sample ID	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA5	BH14-5 SA1	BH14-5 SA2	BH14-5 SA3	BH14-5 SA4	BH14-6 SA1	BH14-6 SA2	BH14-6 SA3A	BH14-7 SA1	BH14-7 SA2	BH14-7 SA4B	BH-1 - 91 S	BH10	BH-10 - 91	BH-11 - 91	BH12
					Start Depth	0	1.5	4.6	0	1.5	6.1	7.6	0	1.5	3.7	4.6	0	1.5	3	0	1.5	5.5	0.15	1.22	0.75	0.75	2.44
					End Depth	1.5	3	6.1	1.5	3.1	7.6	9.2	1.5	3	4.6	6.1	1.5	3	3.8	1.5	3	6.1	0.75	2.44	1.4	1.4	3.66
					Date	21 Aug 2014	21 Aug 2014	21 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	30 Sep 1991	12 May 2006	02 Oct 1991	30 Sep 1991	15 May 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																						
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		2 U			2 U
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		1 U			1 U
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		1 U			1 U
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																								
other SVOC	2-Chloronaphthalene	µg/g																								
other SVOC	2-Hexanone	µg/g																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																								
other SVOC	4-Chlorophenyl Phenylether	µg/g																								
other SVOC	Bis (2-chloroethoxy) methane	µg/g																								
other SVOC	Butyl benzyl phthalate	µg/g																								
other SVOC	Chloroethane	µg/g																								
other SVOC	Chloromethane	µg/g																								
other SVOC	Di-N-Butylphthalate	µg/g																								
other SVOC	Di-n-octyl phthalate	µg/g																								
other SVOC	Isophorone	µg/g																								
other SVOC	Nitrobenzene	µg/g																								
other SVOC	N-Nitrosodi-N-propylamine	µg/g																								
other SVOC	N-Nitrosodiphenylamine	µg/g																								
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																					
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76						**21**	**17**								**19**	0.0071 U		1 U			1 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76						**13**	**10**								**11**	0.005 U		**27**			1 U
PAH	Acenaphthene	µg/g	0.072	7.9	560						**7.59**	**5.59**								**8.39**	0.005 U		**3**			1 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15						**0.83**	**0.61**								**0.34**	0.005 U		1 U			1 U
PAH	Anthracene	µg/g	0.22	0.67	0.67						**3.59**	**2.59**								**4**	0.005 U		**4**			1 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11						**2.09**	**1.6**								**1.4**	0.005 U		**6**			1 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13						**1.4**	**1.1**								**0.85**	0.005 U		**4.99**			1 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78							**1.2**	**0.91**								**0.64**	0.005 U					
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		**7**			1 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13						**0.56**	**0.47**								**0.36**	0.005 U		**3**			1 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13						**0.38**	**0.3**								**0.22**	0.005 U		**2**			1 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11						**1.8**	**1.4**								**1.1**	0.005 U		**6**			1 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13						**0.14**	**0.11**								**0.09**	0.005 U		**1**			1 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000						**3.9**	**3.2**								**3.3**	0.005 U		**13**			1 U
PAH	Fluorene	µg/g	0.19	62	62						**3.9**	**2.7**								**4.19**	0.005 U		**4.99**			1 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13						**0.54**	**0.46**								**0.31**	0.005 U		**3**			1 U
PAH	Naphthalene	µg/g	0.09	0.6	200						**30**	**25**								**23**	0.005 U		**1**			1 U
PAH	Phenanthrene	µg/g	0.69	6.2	270						**10**	**7**								**12**	0.005 U		**17.99**			1 U
PAH	Pyrene	µg/g	1	78	2600						**5**	**3.9**								**4.5**	0.005 U		**12**			1 U
PCB	Aroclor 1016	µg/g																								
PCB	Aroclor 1221	µg/g																								
PCB	Aroclor 1232	µg/g																								
PCB	Aroclor 1242	µg/g																								
PCB	Aroclor 1248	µg/g																								
PCB	Aroclor 1254	µg/g																								
PCB	Aroclor 1260	µg/g																								
PCB	Aroclor 1262	µg/g																								
PCB	Aroclor 1268	µg/g																								
PCB	PCB, Total	µg/g	0.3	0.35			0.02 U	0.01 U	0.01 U					0.01 U		0.01 U		0.01 U	0.02 U		0.02 U	0.01 U					
Perchlorate	Perchlorate	µg/g																								
PHC	F1 (C6-C10)	µg/g	25	55	55		20 U	10 U			**20**	10 U		10 U		10 U		10 U	20 U		**120**	10 U		**1700**			**410**
PHC	F1-BTEX	µg/g	25	55	55																					
PHC	F2 (C10-C16)	µg/g	10	98	230		**56**	10 U			**150**	**160**		10 U		10 U		10 U	20 U		**200**	10 U		**1900**			**100**
PHC	F2-Naphth	µg/g	10	98	230																					
PHC	F3 (C16-C34)	µg/g	240	300			**370**	50 U			**180**	**170**		50 U		50 U		**67**	**180**		**420**	50 U		**3000**			**1400**
PHC	F3-PAH	µg/g	240	300																						
PHC	F4 (C34-C50)	µg/g	120	2800			**77**	50 U			50 U	50 U		50 U		50 U		50 U	100 U		100 U	50 U		**1000**			**52**
PHC	F4G-SG	µg/g	120	2800																						
PHC	**Chrom. to baseline at nC5No**	None																								
PHC	Total Hydrocarbons (C6-C50)	µg/g																								
SVOC	Hexachlorocyclopentadiene	µg/g																								
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120						0.05 U	0.05 U												0.5 U			0.39 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		1 U			1 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,2-Dichloroethene (Total)	µg/g																								

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (130)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-4 (54)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-5 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-6 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GAL - BH 14-7 (130)	GOLDER BH-1 - 91	GOLDER BH10	GOLDER BH-10 - 91	GOLDER BH-11 - 91	GOLDER BH12
						Sample ID	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA1	BH14-4 SA2	BH14-4 SA4	BH14-4 SA5	BH14-5 SA1	BH14-5 SA2	BH14-5 SA3	BH14-5 SA4	BH14-6 SA1	BH14-6 SA2	BH14-6 SA3A	BH14-7 SA1	BH14-7 SA2	BH14-7 SA4B	BH-1 - 91 S	BH10	BH-10 - 91	BH-11 - 91	BH12
						Start Depth	0	1.5	4.6	0	1.5	6.1	7.6	0	1.5	3.7	4.6	0	1.5	3	0	1.5	5.5	0.15	1.22	0.75	0.75	2.44
						End Depth	1.5	3	6.1	1.5	3.1	7.6	9.2	1.5	3	4.6	6.1	1.5	3	3.8	1.5	3	6.1	0.75	2.44	1.4	1.4	3.66
						Date	21 Aug 2014	21 Aug 2014	21 Aug 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	14 Jul 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	21 Aug 2014	19 Aug 2014	19 Aug 2014	19 Aug 2014	30 Sep 1991	12 May 2006	02 Oct 1991	30 Sep 1991	15 May 2006
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		1 U			1 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																								
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		1 U			1 U
VOC	2-Butanone	µg/g	0.5	16	230		0.5 U	0.5 U			0.5 U	0.5 U		0.5 U		0.5 U		0.5 U	1 U		1 U	0.5 U		6.3 U			4.99 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		0.5 U	0.5 U			0.5 U	0.5 U		0.5 U		0.5 U		0.5 U	1 U		1 U	0.5 U					
VOC	Acetone	µg/g	0.5	16	16		0.5 U	0.5 U			0.5 U	0.5 U		0.5 U		0.5 U		0.5 U	1 U		1 U	0.5 U		25 U			20 U
VOC	Benzene	µg/g	0.02	0.21	14		0.02 U	0.02 U			**3.7**	**2.3**		0.02 U		0.02 U		0.02 U	0.03 U		**0.11**	0.02 U		**12**			**0.39**
VOC	Bromodichloromethane	µg/g	0.05	13	50		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Bromoform	µg/g	0.05	0.27	21		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.75 U			0.6 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Chloroform	µg/g	0.05	0.05	9.5		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			0.02 U	0.02 U			0.02 U	0.02 U		0.02 U		0.02 U		0.02 U	0.05 U		0.05 U	0.02 U		0.5 U			0.39 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U					
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.75 U			0.6 U
VOC	Ethylbenzene	µg/g	0.05	2	17		0.02 U	0.02 U			**3.7**	**6.9**		0.02 U		0.02 U		0.02 U	0.03 U		**35**	20 U		**11**			0.39 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		6.3 U			4.99 U
VOC	n-Hexane	µg/g	0.05	2.8	54		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U					
VOC	Styrene	µg/g	0.05	0.7	66		50 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Toluene	µg/g	0.2	2.3	68		0.02 U	0.02 U			**0.09**	**0.09**		0.02 U		0.02 U		0.02 U	0.03 U		**0.49**	0.02 U		**1.6**			0.39 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			0.03 U	0.03 U			0.03 U	0.03 U		0.03 U		0.03 U		0.03 U	0.07 U		0.07 U	0.03 U		0.5 U			0.39 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300		0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U		0.5 U			0.39 U
VOC	Trichlorofluoromethane	µg/g	0.25	4			0.05 U	0.05 U			0.05 U	0.05 U		0.05 U		0.05 U		0.05 U	0.1 U		0.1 U	0.05 U					
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		0.02 U	0.02 U			0.02 U	0.02 U		0.02 U		0.02 U		0.02 U	0.03 U		0.03 U	0.02 U		0.5 U			0.39 U
VOC	Xylene, o	µg/g	0.05	3.1	26		0.02 U	0.02 U			**1.2**	**1.7**		0.02 U		0.02 U		0.02 U	0.03 U		**13**	0.02 U					
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		0.02 U	0.02 U			**2.3**	**2.9**		0.02 U		0.02 U		0.02 U	0.03 U		**23**	0.02 U					
VOC	Xylenes, Total	µg/g	0.05	3.1	26		0.02 U	0.02 U			**3.5**	**4.59**		0.02 U		0.02 U		0.02 U	0.03 U		**7**	0.02 U		**9.99**			**0.79**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	GOLDER BH-12 - 91	GOLDER BH13	GOLDER BH-13A - 91	GOLDER BH14	GOLDER BH-14 - 92	GOLDER BH15	GOLDER BH-15 - 92	GOLDER BH-16 - 92	GOLDER BH-16 - 92	GOLDER BH-17 - 92	GOLDER BH-17 - 92	GOLDER BH-18 - 92	GOLDER BH-18 - 92	GOLDER BH-2 - 91	GOLDER BH-20A - 92	GOLDER BH-21 - 92	GOLDER BH-3 - 91	GOLDER BH-3 - 91	GOLDER BH-5 - 91	GOLDER BH-6 - 91	GOLDER BH-7 - 91	GOLDER BH-7 - 91
					Sample ID	BH-12 - 91	BH13	BH-13A - 91	BH14	BH-14 - 92	BH15	BH-15 - 92	BH-16 - 92 D	BH-16 - 92 S	BH-17 - 92 D	BH-17 - 92 S	BH-18 - 92 D	BH-18 - 92 S	BH-2 - 91	BH-20A - 92	BH-21 - 92	BH-3 - 91	BH-3-91	BH-5 - 91	BH-6 - 91	BH-7 - 91 D	BH-7 - 91 S
					Start Depth	0.15	2.44	0.75	2.44	0.75	3.66	1.5	3.8	0.3	2.3	0.15	2.3	0.15	0.15	1.5	0.15	3.05	0.75	0.15	0	1.5	0.75
					End Depth	0.75	3.66	1.4	3.66	1.4	4.23	2.15	4.42	0.7	2.9	0.75	2.9	0.75	0.75	2.15	0.75	3.7	1.4	0.45	0.6	2.15	1.4
					Date	30 Sep 1991	15 May 2006	01 Oct 1991	15 May 2006	27 May 1992	15 May 2006	27 May 1992	29 May 1992	29 May 1992	28 May 1992	28 May 1992	27 May 1992	27 May 1992	01 Oct 1991	28 May 1992	28 May 1992	02 Oct 1991	02 Oct 1991	01 Oct 1991	01 Oct 1991	30 Sep 1991	30 Sep 1991
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190						0.09 U																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43						0.19 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U								
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390						0.09 U																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59						0.19 U																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15						0.09 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U								
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15							0.5 U	0.5 U		0.5 U		0.5 U			0.5 U								
ABN	2-Chlorophenol	µg/g	0.1	1.6	21						0.09 U																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66						0.5 U	9.99 U	9.99 U		9.99 U		9.99 U			9.99 U								
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45						0.19 U																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92						0.19 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U								
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120						0.09 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U								
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09						0.5 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U								
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07						0.19 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U								
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02						0.19 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U								
ABN	Phenol	µg/g	0.5	9.4	46						0.19 U																	
CHEMISTRY	Ammonia	µg/g									**157**																	
CHEMISTRY	Bromide	µg/g								3 U				3 U		**4.99**		3 U			3 U							
CHEMISTRY	Chlorite	µg/g									**500000**																	
CHEMISTRY	Fluoride	µg/g	110 [c.]							**4.99**				4.99 U		4.99 U		4.99 U			4.99 U							
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																									
CHEMISTRY	Moisture, percent	%																										
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]							1 U	2 U			1 U		1 U		1 U			1 U							
CHEMISTRY	Nitrite (as N)	µg/g								1 U	0.5 U			1 U		1 U		1 U			**1**							
Chemistry	ortho-Phosphate	µg/g								4.99 U				4.99 U		4.99 U		4.99 U			4.99 U							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]																									
CHEMISTRY	Sulfate	µg/g								**39**				**52.99**		**132**		**71**			**56**							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g									**495**																	
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27						0.09 U																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8						0.09 U																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46						0.09 U																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9						0.19 U																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%																										
INORGANIC	Aluminum	µg/g	26000 [c.]			**8760**		**3609.99**											**3369.99**				**3290**	**11100**	**2050**		**2119.99**
INORGANIC	Antimony	µg/g	1.3	7.5			1 U		**6**		1 U																	
INORGANIC	Arsenic	µg/g	18	18		**7.49**	**21**	**0.89**	**48**		**3**								**4.49**				**1.1**	**3**	**5.59**		**0.89**
INORGANIC	Barium	µg/g	220	390		**48.4**	**930**	**15.2**	**870**	**22.9**	**94.99**			**25**		**138**		**285**	**46.3**		**117**		**15**	**76.2**	**31.39**		**13.9**
INORGANIC	Beryllium	µg/g	2.5	4		**0.82**	**0.79**	**0.25**	**0.6**	**0.23**	0.5 U			**0.28**		**0.76**		**0.47**	**0.3**		**0.39**		**0.25**	**0.6**	**0.21**		**0.18**
INORGANIC	Boron	µg/g	36	120			**2.52**		**2.75**		**0.44**																	
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5																								
INORGANIC	Cadmium	µg/g	1.2	1.2		0.3 U	**1.6**	0.3 U	**4**	0.3 U	**0.6**			0.3 U		**0.6**		**0.6**	**0.3**		**0.6**		0.3 U	0.3 U	**0.5**		**0.5**
INORGANIC	Calcium	µg/g	49000 [c.]			**38500**		**46000**											**41900**				**47700**	**45200**	**65000**		**37299.99**
INORGANIC	Chloride (Cl)	µg/g	130 [c.]							**23.49**				**6.8**		**231**		**150.99**			347 U							
INORGANIC	Chromium	µg/g	70	160		**8.7**	48.99 U	**8.29**	**130**	**9.2**	**17.99**			**10.3**		**14.3**		17.99	**10.6**		**12.3**		**8.1**	**16.79**	**10.2**		**6.2**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8																								
INORGANIC	Cobalt	µg/g	22	22		**6**	**9.6**	2 U	**9.3**	**3**	**8.2**			**8**		**17.99**		**4**	**2**		**3**		2 U	**4.99**	2 U		2 U
INORGANIC	Copper	µg/g	92	140		**41.99**	**120**	**5.29**	**1000**	**7.89**	**22**			**8**		**90.3**		**38.5**	**39.99**		**32.29**		**5.59**	**25.59**	**32.4**		**5.29**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																							
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7																								
INORGANIC	Iron	µg/g	34000 [c.]			**12400**		**7030**											**9770**				**7139.99**	**17299.99**	**6989.99**		**4599.99**
INORGANIC	Lead	µg/g	120	120		**48**	**860**	**7**	**3700**	**12**	**11**			**11**		**183**		**268**	**127**		**170**		**8.99**	**52.99**	**75**		**15**
INORGANIC	Magnesium	µg/g	15000 [c.]			**5190**		**5270**											**4280**				**5010**	**7010**	**16400**		**3579.99**
INORGANIC	Manganese	µg/g	1400 [c.]			**176**		**169**											**169**				**161**	**310.99**	**170**		**110**
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.13**	**1.7**	**0.09**	**5.4**		**0.09**								**0.11**				**0.03**	**0.18**	**0.07**		**0.04**
INORGANIC	Molybdenum	µg/g	2	6.9			**4.4**	3 U	**4.8**	3 U	0.5 U			3 U		3 U		3 U	3 U		3 U		3 U	3 U	3 U		3 U
INORGANIC	Nickel	µg/g	82	100		**13**	**35**	**3**	**50**	**12**	**17**			**12**		**30.99**		**17**	**4.99**		**16**		**2**	**11**	2 U		**2**
INORGANIC	Phosphorus	µg/g	1500 [c.]			**479.99**		**460**			**699.99**								**430**			**490**		**610**	**389.99**		**389.99**
INORGANIC	Potassium	µg/g	4900 [c.]			**769.99**		**600**			**2000**								**410**				**490**	**1820**	**250**		**360**
INORGANIC	Selenium	µg/g	1.5	2.4		**0.69**	**2**	0.19 U	**12**		1 U								**0.19**				0.19 U	**0.39**	0.19 U		0.19 U
INORGANIC	Silver	µg/g	0.5	20		0.19 U	**3.4**	0.19 U	**3.59**	0.19 U	0.3 U			0.19 U		0.19 U		0.19 U	0.19 U		0.19 U		0.19 U	0.19 U	0.19 U		0.19 U
INORGANIC	Sodium	µg/g	180 [c.]			**360**		**270**											**170**				**239.99**	**370**	**370**		**120**
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000																								
INORGANIC	Strontium	µg/g	77 [c.]			**77**		**72.4**											**71.4**				**75.4**	**76.09**	**69.39**		**56.1**
INORGANIC	Thallium	µg/g	1	1		2 U	1 U	2 U	1 U		1 U								2 U				2 U	2 U	2 U		2 U
INORGANIC	Titanium	µg/g	4700 [c.]			**272**		**158.99**											**134**				**146**	**449.99**	**77**		**130**
INORGANIC	Uranium (U)	µg/g	2.5	23																								
INORGANIC	Vanadium	µg/g	86	86		**16**	**34**	**14.5**	**41**	**13.8**	**28**			**15.9**		**26.9**		**22.5**	**13.1**		**20.09**		**13.5**	**25.69**	**13.5**		**9.2**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																							
INORGANIC	Zinc	µg/g	290	340		**87.39**	**610**	**14.6**	**1100**	**28.4**	**43**			**23.1**		**182**		**286**	**88.9**		**143**		**15.9**	**52.4**	**87.8**		**23.49**
METAL	Zirconium	µg/g	48 [e.]			**7**		**4.99**											**4**				**4.99**	**8.99**	**4**		**4**

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	GOLDER BH-12 - 91	GOLDER BH13	GOLDER BH-13A - 91	GOLDER BH14	GOLDER BH-14 - 92	GOLDER BH15	GOLDER BH-15 - 92	GOLDER BH-16 - 92	GOLDER BH-16 - 92	GOLDER BH-17 - 92	GOLDER BH-17 - 92	GOLDER BH-18 - 92	GOLDER BH-18 - 92	GOLDER BH-2 - 91	GOLDER BH-20A - 92	GOLDER BH-21 - 92	GOLDER BH-3 - 91	GOLDER BH-3 - 91	GOLDER BH-5 - 91	GOLDER BH-6 - 91	GOLDER BH-7 - 91	GOLDER BH-7 - 91
					Sample ID	BH-12 - 91	BH13	BH-13A - 91	BH14	BH-14 - 92	BH15	BH-15 - 92	BH-16 - 92 D	BH-16 - 92 S	BH-17 - 92 D	BH-17 - 92 S	BH-18 - 92 D	BH-18 - 92 S	BH-2 - 91	BH-20A - 92	BH-21 - 92	BH-3 - 91	BH-3-91	BH-5 - 91	BH-6 - 91	BH-7 - 91 D	BH-7 - 91 S
					Start Depth	0.15	2.44	0.75	2.44	0.75	3.66	1.5	3.8	0.3	2.3	0.15	2.3	0.15	0.15	1.5	0.15	3.05	0.75	0.15	0	1.5	0.75
					End Depth	0.75	3.66	1.4	3.66	1.4	4.23	2.15	4.42	0.7	2.9	0.75	2.9	0.75	0.75	2.15	0.75	3.7	1.4	0.45	0.6	2.15	1.4
					Date	30 Sep 1991	15 May 2006	01 Oct 1991	15 May 2006	27 May 1992	15 May 2006	27 May 1992	29 May 1992	29 May 1992	28 May 1992	28 May 1992	27 May 1992	27 May 1992	01 Oct 1991	28 May 1992	28 May 1992	02 Oct 1991	02 Oct 1991	01 Oct 1991	01 Oct 1991	30 Sep 1991	30 Sep 1991
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																						
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14						0.19 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U							
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6						0.09 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U							
OCP	Hexachloroethane	µg/g	0.01	0.089	22						0.09 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U							
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																									
other SVOC	2-Chloronaphthalene	µg/g											0.19 U		0.19 U		0.19 U			0.19 U							
other SVOC	2-Hexanone	µg/g																									
other SVOC	4-Bromophenyl Phenyl Ether	µg/g											0.5 U		0.5 U		0.5 U			0.5 U							
other SVOC	4-Chlorophenyl Phenylether	µg/g											0.19 U		0.19 U		0.19 U			0.19 U							
other SVOC	Bis (2-chloroethoxy) methane	µg/g											0.19 U		0.19 U		0.19 U			0.19 U							
other SVOC	Butyl benzyl phthalate	µg/g											0.5 U		0.5 U		0.5 U			0.5 U							
other SVOC	Chloroethane	µg/g										2 U			2 U		2 U			2 U					2 U		
other SVOC	Chloromethane	µg/g										1 U			1 U		1 U			1 U					1 U		
other SVOC	Di-N-Butylphthalate	µg/g											0.19 U		0.19 U		0.19 U			0.09 U							
other SVOC	Di-n-octyl phthalate	µg/g											0.5 U		0.5 U		0.5 U			0.5 U							
other SVOC	Isophorone	µg/g											0.19 U		0.19 U		0.19 U			0.19 U							
other SVOC	Nitrobenzene	µg/g											0.19 U		0.19 U		0.19 U			0.19 U							
other SVOC	N-Nitrosodi-N-propylamine	µg/g											1 U		1 U		1 U			1 U							
other SVOC	N-Nitrosodiphenylamine	µg/g											0.5 U		0.5 U		0.5 U			0.5 U							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																						
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**0.11**		**22**		0.09 U	0.19 U	**0.69**		**0.3**		**0.39**			0.19 U							
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**0.19**		**0.005**		0.09 U	0.19 U	**1.1**		0.19 U		**0.69**			0.19 U							
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.18**		**2.2**		0.09 U	0.09 U	**0.39**		**0.6**		**0.39**			0.19 U							
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.16**		**0.005**		0.09 U	0.19 U	0.19 U		0.09 U		**0.5**			0.19 U							
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.59**		**0.44**		0.09 U	0.19 U	0.19 U		**0.5**		**2**			0.09 U							
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**1.3**		**0.76**		0.09 U	0.09 U	0.3 U		**0.6**		**3.5**			0.3 U							
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.98**		**0.38**		0.09 U	0.19 U	0.3 U		**0.39**		**1.8**			0.3 U							
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																							
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13		**1.2**		**0.73**		0.09 U	0.3 U	0.3 U		**0.69**		**3.3**			0.3 U							
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.56**		**0.29**		0.09 U	0.3 U	0.3 U		0.19 U		**0.79**			0.3 U							
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.46**		**0.26**		0.09 U																
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.98**		**0.92**		0.09 U	0.19 U	0.3 U		**0.69**		**3.19**			0.3 U							
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.13**		**0.07**		0.09 U	0.3 U	0.3 U		0.3 U		0.3 U			0.3 U							
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**3.1**		**1.9**		0.09 U	0.3 U	0.09 U		**1.2**		**7.4**			0.19 U							
PAH	Fluorene	µg/g	0.19	62	62		**0.26**		**3.5**		0.09 U	0.09 U	0.09 U		**0.69**		**1.6**			0.19 U							
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.57**		**0.28**		0.09 U	0.3 U	0.3 U		0.19 U		**0.69**			0.3 U							
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.47**		**0.005**		0.09 U	**0.39**	**6.6**		**0.3**		**0.89**			0.19 U							
PAH	Phenanthrene	µg/g	0.69	6.2	270		**2.4**		**0.09**		0.09 U	0.3 U	0.19 U		**2**		**8.29**			0.19 U							
PAH	Pyrene	µg/g	1	78	2600		**2.7**		**1.7**		0.09 U	**0.5**	0.09 U		**1.4**		**8**			0.19 U							
PCB	Aroclor 1016	µg/g																									
PCB	Aroclor 1221	µg/g																									
PCB	Aroclor 1232	µg/g																									
PCB	Aroclor 1242	µg/g																									
PCB	Aroclor 1248	µg/g																									
PCB	Aroclor 1254	µg/g																									
PCB	Aroclor 1260	µg/g																									
PCB	Aroclor 1262	µg/g																									
PCB	Aroclor 1268	µg/g																									
PCB	PCB, Total	µg/g	0.3	0.35																							
Perchlorate	Perchlorate	µg/g																									
PHC	F1 (C6-C10)	µg/g	25	55	55		9.99 U		**2800**		**220**																
PHC	F1-BTEX	µg/g	25	55	55																						
PHC	F2 (C10-C16)	µg/g	10	98	230		**289.99**		**8399.99**		**7400**																
PHC	F2-Naphth	µg/g	10	98	230																						
PHC	F3 (C16-C34)	µg/g	240	300			**920**		**4599.99**		**5099.99**																
PHC	F3-PAH	µg/g	240	300																							
PHC	F4 (C34-C50)	µg/g	120	2800			**50**		**150**		**349.99**																
PHC	F4G-SG	µg/g	120	2800																							
PHC	**Chrom. to baseline at nC5No**	None																									
PHC	Total Hydrocarbons (C6-C50)	µg/g																									
SVOC	Hexachlorocyclopentadiene	µg/g											2 U		2 U		2 U			2 U							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		0.09 U		0.09 U		0.002 U																
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		0.09 U		0.09 U		0.002 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120		0.09 U		0.09 U		0.002 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		0.09 U		0.09 U		0.002 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.19 U				0.19 U	
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		0.09 U		0.09 U		0.002 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		0.09 U		0.09 U		0.09 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.09 U				0.09 U	
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	1,2-Dichloroethene (Total)	µg/g																									

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	GOLDER BH-12 - 91	GOLDER BH13	GOLDER BH-13A - 91	GOLDER BH14	GOLDER BH-14 - 92	GOLDER BH15	GOLDER BH-15 - 92	GOLDER BH-16 - 92	GOLDER BH-16 - 92	GOLDER BH-17 - 92	GOLDER BH-17 - 92	GOLDER BH-18 - 92	GOLDER BH-18 - 92	GOLDER BH-2 - 91	GOLDER BH-20A - 92	GOLDER BH-21 - 92	GOLDER BH-3 - 91	GOLDER BH-3 - 91	GOLDER BH-5 - 91	GOLDER BH-6 - 91	GOLDER BH-7 - 91	GOLDER BH-7 - 91
						Sample ID	BH-12 - 91	BH13	BH-13A - 91	BH14	BH-14 - 92	BH15	BH-15 - 92	BH-16 - 92 D	BH-16 - 92 S	BH-17 - 92 D	BH-17 - 92 S	BH-18 - 92 D	BH-18 - 92 S	BH-2 - 91	BH-20A - 92	BH-21 - 92	BH-3 - 91	BH-3-91	BH-5 - 91	BH-6 - 91	BH-7 - 91 D	BH-7 - 91 S
						Start Depth	0.15	2.44	0.75	2.44	0.75	3.66	1.5	3.8	0.3	2.3	0.15	2.3	0.15	0.15	1.5	0.15	3.05	0.75	0.15	0	1.5	0.75
						End Depth	0.75	3.66	1.4	3.66	1.4	4.23	2.15	4.42	0.7	2.9	0.75	2.9	0.75	0.75	2.15	0.75	3.7	1.4	0.45	0.6	2.15	1.4
						Date	30 Sep 1991	15 May 2006	01 Oct 1991	15 May 2006	27 May 1992	15 May 2006	27 May 1992	29 May 1992	29 May 1992	28 May 1992	28 May 1992	27 May 1992	27 May 1992	01 Oct 1991	28 May 1992	28 May 1992	02 Oct 1991	02 Oct 1991	01 Oct 1991	01 Oct 1991	30 Sep 1991	30 Sep 1991
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																							
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		0.09 U		0.09 U		0.09 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.09 U				0.09 U	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																								
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		0.09 U		0.09 U		0.09 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.09 U				0.09 U	
VOC	2-Butanone	µg/g	0.5	16	230		1.26 U		1.26 U		0.02 U																	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150																							
VOC	Acetone	µg/g	0.5	16	16		4.99 U		4.99 U		**3**																	
VOC	Benzene	µg/g	0.02	0.21	14		**0.3**		**0.09**		**0.005**	0.04 U	**0.19**		0.04 U		0.04 U			0.04 U		0.09 U				0.09 U	
VOC	Bromodichloromethane	µg/g	0.05	13	50		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	Bromoform	µg/g	0.05	0.27	21		0.09 U		0.09 U		0.002 U	1 U	1 U		1 U		1 U			1 U		1 U				1 U	
VOC	Bromomethane	µg/g	0.05	0.05	1.4		0.15 U		0.15 U		0.003 U	1 U	1 U		1 U		1 U			1 U		1 U				1 U	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		0.09 U		0.09 U		0.002 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	Chloroform	µg/g	0.05	0.05	9.5		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				**17.7**	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			0.09 U		0.09 U		0.002 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.19 U				0.19 U	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																							
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.15 U		0.15 U		0.003 U	0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.09**		0.09 U		**0.004**	**14.9**	**4.1**		0.09 U		0.09 U			0.09 U		**5.59**				**25.4**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		1.26 U		1.26 U		**0.73**																	
VOC	n-Hexane	µg/g	0.05	2.8	54																							
VOC	Styrene	µg/g	0.05	0.7	66		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		0.09 U		0.09 U		0.002 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.19 U				0.19 U	
VOC	Toluene	µg/g	0.2	2.3	68		**0.3**		0.09 U		0.005 U	**22**	0.09 U		**0.69**		0.09 U			0.09 U		0.09 U				**53.5**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			0.09 U		0.09 U		0.002 U	0.19 U	0.19 U		0.19 U		0.19 U			0.19 U		0.19 U				0.19 U	
VOC	Trichloroethylene	µg/g	0.05	0.061	300		0.09 U		0.09 U		0.002 U	0.09 U	0.09 U		0.09 U		0.09 U			0.09 U		0.09 U				0.09 U	
VOC	Trichlorofluoromethane	µg/g	0.25	4								0.5 U	0.5 U		0.5 U		0.5 U			0.5 U		0.5 U				0.5 U	
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		0.09 U		0.09 U		0.002 U	1 U	1 U		1 U		1 U			1 U		1 U				1 U	
VOC	Xylene, o	µg/g	0.05	3.1	26							**21.6**	**3.59**		0.09 U		**0.5**			0.09 U		**3**				**33.5**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26							**53.7**	**6.5**		0.09 U		**0.6**			0.09 U		**17.8**				**73.2**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.5**		**0.3**		**0.01**																	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	GOLDER BH-8 - 91	GOLDER BH-9 - 91	MTE MW4-08	MW10A-15 S-11102463-072815-LG-201	MW10A-15 S-11102463-072815-LG-202	MW10A-15 S-11102463-072815-LG-203	MW11-15 S-11102463-101915-LG-285	MW11-15 S-11102463-101915-LG-286	MW11-15 S-11102463-101915-LG-287	MW12A-15 S-11102463-102715-TB-471	MW12A-15 S-11102463-102715-TB-472	MW12A-15 S-11102463-102715-TB-473	MW13-15 S-11102463-102115-LG-291	MW13-15 S-11102463-102115-LG-292	MW13-15 S-11102463-102115-LG-293	MW14-15 S-11102463-102015-LG-288	MW14-15 S-11102463-102015-LG-289	MW14-15 S-11102463-102015-LG-290	MW15-15 S-11102463-102315-LG-301	MW15-15 S-11102463-102315-LG-302
					Sample ID	BH-8 - 91	BH-9 - 91 S	MW4-08S																		
					Start Depth	0.15	0.15		0.1	7	5.33	3.04	0.76	6.09	0.76	6.09	2.28	0	3.04	6.85	0.76	2.28	4.57	0.76	3.04
					End Depth	0.75	0.75		2	2.89	5.94	3.65	1.37	6.7	1.37	6.7	2.89	0	3.65	7.46	1.37	2.89	5.18	1.37	3.65
					Date	02 Oct 1991	01 Oct 1991	19 Nov 2008	28 Jul 2015	28 Jul 2015	28 Jul 2015	19 Oct 2015	19 Oct 2015	19 Oct 2015	27 Oct 2015	27 Oct 2015	27 Oct 2015	21 Oct 2015	21 Oct 2015	21 Oct 2015	20 Oct 2015	20 Oct 2015	20 Oct 2015	23 Oct 2015	23 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]					**8.1**																	
CHEMISTRY	Moisture, percent	%							**1.93**	**20.4**	**22.5**	**16.3**	**4.31**	**14.5**	**15.3**	**18**	**15.6**	**4.66**	**14.1**	**17.5**	**8.43**	**13.4**	**31.2**	**5.79**	**45**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]						**7.98**	**7.37**	**7.38**	**7.34**	**7.8**	**7.79**	**7.56**	**7.4**	**7.61**	**7.79**	**7.57**	**7.47**	**7.7**	**7.56**	**7.25**	**7.8**	**6.98**
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%										**16.3**	**4.31**	**14.5**	**15.3**	**18**	**15.6**	**4.66**	**14.1**	**17.5**	**8.43**	**13.4**	**31.2**	**5.79**	**45**
INORGANIC	Aluminum	µg/g	26000 [c.]			**2609.99**	**5500**																		
INORGANIC	Antimony	µg/g	1.3	7.5				**3.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**25.8**
INORGANIC	Arsenic	µg/g	18	18		**1.6**	**3.1**	**10.6**	**2.8**	**1.3**	**1**	1 U	**1.1**	1 U	**5.8**	1 U	1 U	**2.6**	1 U	**1.7**	**3.3**	1 U	**1.3**	1 U	**19.8**
INORGANIC	Barium	µg/g	220	390		**25.3**	**39.99**	**128**	**56.4**	**25.1**	**18.1**	**7.2**	**9.6**	**9.3**	**83.8**	**6.9**	**5.8**	**31.6**	**10.3**	**179**	**27.9**	**11**	**57.9**	**8**	**302**
INORGANIC	Beryllium	µg/g	2.5	4		**0.26**	**0.38**	**0.5**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.56**
INORGANIC	Boron	µg/g	36	120				**0.69**	**10.3**	5 U	5 U	5 U	5 U	5 U	**8.3**	5 U	5 U	5 U	5 U	5 U	**8.6**	5 U	**9.1**	5 U	**29.3**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5					**0.5**	**0.72**	**0.17**	0.1 U	**0.18**	0.1 U	**0.4**	0.1 U	**0.11**	**0.35**	**0.14**	**0.24**	**1.34**	**0.21**	**3.5**	0.1 U	**1.53**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.3 U	0.3 U	**0.79**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U	**0.92**
INORGANIC	Calcium	µg/g	49000 [c.]			**90000**	**53599.99**																		
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**8.89**	**10.5**	**16.5**	**15.2**	**7.9**	**7.3**	**4.3**	**6**	**8.2**	**43.6**	**3.1**	**3.7**	**12.8**	**5.5**	**8.4**	**14.1**	**5.6**	**12.9**	**5.2**	**29.3**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8					0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.39**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		2 U	**2**	**7.1**	**2.1**	**3.1**	**2.8**	**1.5**	**2**	**2.1**	**7.7**	**1.6**	**1.4**	**3.7**	**2**	**1.8**	**5.4**	**2.1**	**4.3**	**1.6**	**7.3**
INORGANIC	Copper	µg/g	92	140		**10.4**	**39.6**	**83.6**	**6.7**	**5.1**	**5.5**	**1.6**	**2.5**	**3.9**	**44.9**	**2.5**	**1.9**	**28.2**	**3.2**	**7.2**	**54.2**	**3.1**	**9**	**1.8**	**136**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02			1 U																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7				**0.2**	**1.22**	**1.21**	**0.3**	**0.0896**	**0.107**	**0.138**	**0.256**	**0.143**	**0.138**	**0.158**	**0.124**	**0.206**	**0.373**	**0.195**	**0.49**	**0.154**	**0.545**
INORGANIC	Iron	µg/g	34000 [c.]			**8140**	**10700**																		
INORGANIC	Lead	µg/g	120	120		**22**	**68.99**	**207**	**39.7**	**3.7**	**2.8**	**1.6**	**4**	**3.8**	**61.4**	**2.3**	**2.7**	**47.6**	**5**	**371**	**175**	**11.6**	**4.7**	**2.7**	**630**
INORGANIC	Magnesium	µg/g	15000 [c.]			**9930**	**5989.99**																		
INORGANIC	Manganese	µg/g	1400 [c.]			**190**	**180**																		
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.09**	**0.07**	**0.31**	**0.01**	**0.01**	**0.0092**	0.005 U	**0.011**	**0.0592**	**0.0971**	0.005 U	0.005 U	**0.271**	**0.0124**	**0.0481**	**0.35**	**0.213**	**0.0138**	**0.0389**	**8.54 D**
INORGANIC	Molybdenum	µg/g	2	6.9		3 U	3 U	**2.7**	**2.8**	1 U	1 U	1 U	1 U	1 U	**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**3.1**
INORGANIC	Nickel	µg/g	82	100		2 U	**6**	**20.9**	**12.2**	**6**	**5.3**	**2.6**	**3.4**	**5.9**	**26.5**	**3.4**	**2.9**	**8.4**	**4.1**	**3.8**	**12**	**3.8**	**9**	**2.7**	**18.4**
INORGANIC	Phosphorus	µg/g	1500 [c.]			**310**	**389.99**																		
INORGANIC	Potassium	µg/g	4900 [c.]			**500**	**790**																		
INORGANIC	Selenium	µg/g	1.5	2.4		0.19 U	**0.19**	0.79 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2.9**
INORGANIC	Silver	µg/g	0.5	20		0.19 U	0.19 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.44**
INORGANIC	Sodium	µg/g	180 [c.]			**330**	**170**																		
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000				**0.18**	**1.19**	**1.41**	**0.52**		**0.45**		**0.67**		**0.12**			**0.52**	**2.56**			**0.31**	**1.49**
INORGANIC	Strontium	µg/g	77 [c.]			**109**	**82.5**																		
INORGANIC	Thallium	µg/g	1	1		2 U	2 U	0.39 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]			**139**	**175**																		
INORGANIC	Uranium (U)	µg/g	2.5	23					1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**14.4**	**17.2**	**19.2**	**9.4**	**13.3**	**13.4**	**9**	**15.1**	**6.9**	**27.7**	**4.8**	**7.6**	**23.5**	**10.5**	**8.3**	**21.2**	**11.6**	**20.5**	**13.2**	**23.1**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02				0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**32.09**	**72.99**	**180.99**	**191**	**18.3**	**15.1**	**7.3**	**10.5**	**16.3**	**76.6**	**8.1**	**8.1**	**59.5**	**11.7**	**126**	**43.6**	**10.7**	**24.8**	**7.6**	**1250**
METAL	Zirconium	µg/g	48 [e.]			**4.99**	**6**																		

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	GOLDER BH-8 - 91	GOLDER BH-9 - 91	MTE MW4-08	MW10A-15 S-11102463-	MW10A-15 S-11102463-	MW10A-15 S-11102463-	MW11-15 S-11102463-	MW11-15 S-11102463-	MW11-15 S-11102463-	MW12A-15 S-11102463-	MW12A-15 S-11102463-	MW12A-15 S-11102463-	MW13-15 S-11102463-	MW13-15 S-11102463-	MW13-15 S-11102463-	MW14-15 S-11102463-	MW14-15 S-11102463-	MW14-15 S-11102463-	MW15-15 S-11102463-	MW15-15 S-11102463-
						Sample ID	BH-8 - 91	BH-9 - 91 S	MW4-08S	072815-LG-201	072815-LG-202	072815-LG-203	101915-LG-285	101915-LG-286	101915-LG-287	102715-TB-471	102715-TB-472	102715-TB-473	102115-LG-291	102115-LG-292	102115-LG-293	102015-LG-288	102015-LG-289	102015-LG-290	102315-LG-301	102315-LG-302
						Start Depth	0.15	0.15		0.1	7	5.33	3.04	0.76	6.09	0.76	6.09	2.28	0	3.04	6.85	0.76	2.28	4.57	0.76	3.04
						End Depth	0.75	0.75		2	2.89	5.94	3.65	1.37	6.7	1.37	6.7	2.89	0	3.65	7.46	1.37	2.89	5.18	1.37	3.65
						Date	02 Oct 1991	01 Oct 1991	19 Nov 2008	28 Jul 2015	28 Jul 2015	28 Jul 2015	19 Oct 2015	19 Oct 2015	19 Oct 2015	27 Oct 2015	27 Oct 2015	27 Oct 2015	21 Oct 2015	21 Oct 2015	21 Oct 2015	20 Oct 2015	20 Oct 2015	20 Oct 2015	23 Oct 2015	23 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																					
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																					
OCP	Hexachloroethane	µg/g	0.01	0.089	22																					
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																								
other SVOC	2-Chloronaphthalene	µg/g																								
other SVOC	2-Hexanone	µg/g																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																								
other SVOC	4-Chlorophenyl Phenylether	µg/g																								
other SVOC	Bis (2-chloroethoxy) methane	µg/g																								
other SVOC	Butyl benzyl phthalate	µg/g																								
other SVOC	Chloroethane	µg/g																								
other SVOC	Chloromethane	µg/g																								
other SVOC	Di-N-Butylphthalate	µg/g																								
other SVOC	Di-n-octyl phthalate	µg/g																								
other SVOC	Isophorone	µg/g																								
other SVOC	Nitrobenzene	µg/g																								
other SVOC	N-Nitrosodi-N-propylamine	µg/g																								
other SVOC	N-Nitrosodiphenylamine	µg/g																								
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76					**0.19**	0.042 U	**0.08**	**44.6**	**70.1**	0.042 U	**0.619**	0.042 U	**3.22**	**0.362**	**63.4**	**108**	**0.382**	**80.4**	**0.361**	**25.1**	**235**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76					**0.08**	0.03 U	**0.08**	**44.6 D**	**70.1 D**	0.03 U	**0.272**	0.03 U	**1.39**	**0.147**	**63.4 D**	**52.9 D**	**0.149**	**31.9 D**	**0.169**	**24.8 D**	**98.2 D**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76					**0.11**	0.03 U	0.03 U	0.3 U	1 U	0.03 U	**0.347**	0.03 U	**1.83**	**0.215**	0.3 U	**54.7 D**	**0.233**	**48.6 D**	**0.191**	**0.32 D**	**136 D**
PAH	Acenaphthene	µg/g	0.072	7.9	560					0.05 U	**0.08**	**0.15**	1.5 U	3 U	0.05 U	0.05 U	0.05 U	**0.055**	0.05 U	**3.06 D**	**27 D**	0.05 U		0.05 U	**2.5 D**	**104 D**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15					0.05 U	0.05 U	**0.06**	0.5 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.67 D**	**2.88 D**	0.05 U	**0.26 D**	0.05 U	0.6 U	**7.8**
PAH	Anthracene	µg/g	0.22	0.67	0.67					0.05 U	**0.17**	**0.3**	**0.328**	**0.63**	0.05 U	0.05 U	0.05 U	0.05 U	**0.059**	**1.05 D**	**13.3 D**	0.05 U	0.25 U	0.05 U	**2.39 D**	**48 D**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11					0.05 U	**0.17**	**0.28**	**0.061**		0.05 U	**0.149**	0.05 U	0.05 U	**0.227**	0.5 U	**8.81 D**	0.05 U	0.25 U	0.05 U	**0.64 D**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13					0.05 U	**0.1**	**0.18**	0.05 U	0.05 U	0.05 U	**0.152**	0.05 U	0.05 U	**0.221**	0.5 U	**5.2 D**	0.05 U	0.25 U	0.05 U	0.5 U	**17.6**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																						
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13					0.05 U	**0.09**	**0.16**	0.05 U	0.05 U	0.05 U	**0.206**	0.05 U	0.05 U	**0.267**	0.5 U	**4.41 D**	0.05 U	0.25 U	0.05 U	0.5 U	**14.7**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13					0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	**0.127**	0.05 U	0.05 U	**0.221**	0.5 U	**1.87 D**	**0.099**	0.25 U	0.05 U	0.5 U	**7.31**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13					0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	**0.073**	0.05 U	0.05 U	**0.078**	0.5 U	**1.37 D**	0.05 U	0.25 U	0.05 U	0.5 U	**6.05**
PAH	Chrysene	µg/g	2.8	7	3.6E+11					0.05 U	**0.17**	**0.27**	**0.077**	**0.119**	0.05 U	**0.187**	0.05 U	**0.052**	**0.239**	0.5 U	**7.66 D**	0.05 U	0.25 U	0.05 U	**0.94 D**	**25.7 D**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13					0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	**0.58 D**	0.05 U	0.25 U	0.05 U	0.5 U	**1.75**
PAH	Fluoranthene	µg/g	0.69	0.69	40000					0.05 U	**0.32**	**0.48**	**0.125**	**0.201**	0.05 U	**0.288**	0.05 U	0.05 U	**0.351**	0.5 U	**18.2 D**	0.05 U	0.25 U		**0.57 D**	**65.6 D**
PAH	Fluorene	µg/g	0.19	62	62					0.05 U	**0.08**	**0.17**	**1.73 D**	**3.29 D**	0.05 U	0.05 U	0.05 U	**0.114**	0.05 U	**3.24 D**	**15.3 D**	0.05 U	**0.85 D**	0.05 U	**4.65 D**	**60.3 D**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13					0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	**0.129**	0.05 U	0.05 U	**0.187**	0.5 U	**1.82 D**	0.05 U	0.25 U	0.05 U	0.5 U	**7.25**
PAH	Naphthalene	µg/g	0.09	0.6	200					**0.06**	0.05 U	0.05 U			0.05 U	**0.227**	0.05 U	**1.5**	**0.099**		**44.4 D**	**0.15**		**0.418**		**237 D**
PAH	Phenanthrene	µg/g	0.69	6.2	270					**0.05**	**0.33**	**0.76**	**2.61**	**5.36**	0.05 U	**0.311**	0.05 U	**0.278**	**0.304**	**6.06 D**	**44.2 D**	**0.135**	**1.13 D**	**0.132**	**13 D**	**174 D**
PAH	Pyrene	µg/g	1	78	2600					0.05 U	**0.44**	**0.65**	**0.304**	**0.469**	0.05 U	**0.291**	0.05 U	**0.069**	**0.367**	**0.92 D**	**23.4 D**	**0.089**	0.25 U	**0.076**	**3.32 D**	**76.6 D**
PCB	Aroclor 1016	µg/g																								
PCB	Aroclor 1221	µg/g																								
PCB	Aroclor 1232	µg/g																								
PCB	Aroclor 1242	µg/g																								
PCB	Aroclor 1248	µg/g																								
PCB	Aroclor 1254	µg/g																								
PCB	Aroclor 1260	µg/g																								
PCB	Aroclor 1262	µg/g																								
PCB	Aroclor 1268	µg/g																								
PCB	PCB, Total	µg/g	0.3	0.35					0.05 U																	
Perchlorate	Perchlorate	µg/g																								
PHC	F1 (C6-C10)	µg/g	25	55	55					5 U	5 U	5 U	**2310 D**	**1290 D**	5 U	5 U	5 U	**411 D**	5 U	**870 D**	**408**	**67.9**	**1780 D**	**12**	**890 D**	**338 D**
PHC	F1-BTEX	µg/g	25	55	55					5 U	5 U	5 U	**2310**	**1290**	5 U	5 U	5 U	**407**	5 U	**860**	**394**	**66.7**	**1780**	**11.1**	**890**	**261**
PHC	F2 (C10-C16)	µg/g	10	98	230					10 U	10 U	10 U	**3880**	**9390**	10 U	10 U	10 U	**1880**	10 U	**3620**	**2120**	**77**	**4910**	10 U	**7250**	**3050**
PHC	F2-Naphth	µg/g	10	98	230					10 U	10 U	10 U	**3880**	**9390**	10 U	10 U	10 U	**1880**	10 U	**3610**	**2080**	**76**	**4910**	10 U	**7250**	**2810**
PHC	F3 (C16-C34)	µg/g	240	300						**186**	**70**	50 U	**698**	**2460**	50 U	**71**	50 U	**3130**	**85**	**2480**	**2090**	**357**	**618**	50 U	**5260**	**4700**
PHC	F3-PAH	µg/g	240	300						**186**	**68**	50 U	**695**	**2460**	50 U	**69**	50 U	**3130**	**83**	**2470**	**1980**	**357**	**617**	50 U	**5240**	**4310**
PHC	F4 (C34-C50)	µg/g	120	2800						**115**	50 U	50 U	**52**	**123**	50 U	**101**	50 U	**1290**	**80**	**554**	**393**	**216**	**120**	50 U	**965**	**829**
PHC	F4G-SG	µg/g	120	2800																						
PHC	**Chrom. to baseline at nC5No**	None								Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g								**301**	72 U	72 U	**6940**	**13300**	72 U	**172**	72 U	**6720**	**165**	**7520**	**5010**	**717**	**7430**	72 U	**14400**	**8920**
SVOC	Hexachlorocyclopentadiene	µg/g																								
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48					0.05 U	0.05 U	0.05 U	11 U	8 U	0.05 U	0.05 U	0.05 U	4.8 U	0.05 U	2.5 U	2 U	0.05 U	11 U	0.05 U	14 U	1.8 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	5 U	0.8 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,2-Dichloroethene (Total)	µg/g																								

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	GOLDER BH-8 - 91	GOLDER BH-9 - 91	MTE MW4-08	MW10A-15 S-11102463-072815-LG-201	MW10A-15 S-11102463-072815-LG-202	MW10A-15 S-11102463-072815-LG-203	MW11-15 S-11102463-101915-LG-285	MW11-15 S-11102463-101915-LG-286	MW11-15 S-11102463-101915-LG-287	MW12A-15 S-11102463-102715-TB-471	MW12A-15 S-11102463-102715-TB-472	MW12A-15 S-11102463-102715-TB-473	MW13-15 S-11102463-102115-LG-291	MW13-15 S-11102463-102115-LG-292	MW13-15 S-11102463-102115-LG-293	MW14-15 S-11102463-102015-LG-288	MW14-15 S-11102463-102015-LG-289	MW14-15 S-11102463-102015-LG-290	MW15-15 S-11102463-102315-LG-301	MW15-15 S-11102463-102315-LG-302
						Sample ID	BH-8 - 91	BH-9 - 91 S	MW4-08S																	
						Start Depth	0.15	0.15		0.1	7	5.33	3.04	0.76	6.09	0.76	6.09	2.28	0	3.04	6.85	0.76	2.28	4.57	0.76	3.04
						End Depth	0.75	0.75		2	2.89	5.94	3.65	1.37	6.7	1.37	6.7	2.89	0	3.65	7.46	1.37	2.89	5.18	1.37	3.65
						Date	02 Oct 1991	01 Oct 1991	19 Nov 2008	28 Jul 2015	28 Jul 2015	28 Jul 2015	19 Oct 2015	19 Oct 2015	19 Oct 2015	27 Oct 2015	27 Oct 2015	27 Oct 2015	21 Oct 2015	21 Oct 2015	21 Oct 2015	20 Oct 2015	20 Oct 2015	20 Oct 2015	23 Oct 2015	23 Oct 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05					0.042 U	0.042 U	0.042 U	1.4 U	1.4 U	0.042 U	0.042 U	0.042 U	0.34 U	0.042 U	0.68 U	0.34 U	0.042 U	1.4 U	0.042 U	1.7 U	0.68 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	2-Butanone	µg/g	0.5	16	230				0.5 U	0.5 U	0.5 U	16 U	16 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	8 U	4 U	0.5 U	16 U	0.5 U	20 U	8 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150				0.5 U	0.5 U	0.5 U	16 U	16 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	8 U	4 U	0.5 U	16 U	0.5 U	20 U	8 U
VOC	Acetone	µg/g	0.5	16	16				0.5 U	0.5 U	0.5 U	16 U	16 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	8 U	4 U	0.5 U	16 U	0.5 U	20 U	8 U
VOC	Benzene	µg/g	0.02	0.21	14				0.0068 U	0.0068 U	0.0068 U	**3.07 D**	**1.21 D**	0.0068 U	**0.0126**	**0.0118**	0.054 U	**0.0186**	**0.15 D**	**1.75 D**	**0.359**	**0.33 D**	**0.517**	0.27 U	**2.97 D**
VOC	Bromodichloromethane	µg/g	0.05	13	50				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	7.5 U	0.05 U	0.8 U	0.4 U	0.07 U	1.6 U	0.05 U	16 U	3 U
VOC	Bromoform	µg/g	0.05	0.27	21				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Chloroform	µg/g	0.05	0.05	9.5				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05					0.03 U	0.03 U	0.03 U	0.96 U	0.96 U	0.03 U	0.03 U	0.03 U	0.24 U	0.03 U	0.48 U	0.24 U	0.03 U	0.96 U	0.03 U	1.2 U	0.48 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Ethylbenzene	µg/g	0.05	2	17				0.018 U	0.018 U	0.018 U	0.58 U	**3.56 D**	0.018 U	**0.03**	0.018 U	**1.06 D**	**0.064**	**6.97 D**	**8.36 D**	**0.107**	**0.84 D**	**0.033**	0.72 U	**42.6 D**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	n-Hexane	µg/g	0.05	2.8	54				0.05 U	0.05 U	0.05 U	**27.2 D**	**9.5 D**	0.05 U	0.05 U	0.05 U	**2.64 D**	**0.129**	**11.3 D**	**5.72 D**	**0.698**	**18.2 D**	**1.63**	2 U	0.8 U
VOC	Styrene	µg/g	0.05	0.7	66				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Toluene	µg/g	0.2	2.3	68				0.08 U	0.08 U	0.08 U	2.6 U	2.6 U	0.08 U	**0.107**	0.08 U	0.64 U	**0.121**	1.3 U	0.64 U	**0.224**	2.6 U	0.08 U	3.2 U	1.3 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220				0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05					0.03 U	0.03 U	0.03 U	0.96 U	0.96 U	0.03 U	0.03 U	0.03 U	0.24 U	0.03 U	0.48 U	0.24 U	0.03 U	0.96 U	0.03 U	1.2 U	0.48 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300				0.01 U	0.01 U	0.01 U	0.32 U	0.32 U	0.01 U	0.01 U	0.01 U	0.08 U	0.01 U	0.16 U	0.08 U	0.01 U	0.32 U	0.01 U	0.4 U	0.16 U
VOC	Trichlorofluoromethane	µg/g	0.25	4					0.05 U	0.05 U	0.05 U	1.6 U	1.6 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.8 U	0.4 U	0.05 U	1.6 U	0.05 U	2 U	0.8 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270				0.02 U	0.02 U	0.02 U	0.64 U	0.64 U	0.02 U	0.02 U	0.02 U	0.16 U	0.02 U	0.32 U	0.16 U	0.02 U	0.64 U	0.02 U	0.8 U	0.32 U
VOC	Xylene, o	µg/g	0.05	3.1	26				**0.02**	0.02 U	0.02 U			0.02 U	**0.045**	0.02 U	**0.43 D**	**0.279**		1.66 D	**0.11**	0.64 U	**0.04**	0.8 U	**13.3 D**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26				0.03 U	0.03 U	0.03 U	0.96 U	0.96 U	0.03 U	**0.067**	0.03 U	**2.81 D**	**0.193**	**2.08 D**	**2.24 D**	**0.426**	0.96 U	**0.261**	1.2 U	**18.2 D**
VOC	Xylenes, Total	µg/g	0.05	3.1	26				0.05 U	0.05 U	0.05 U	1.2 U	1.2 U	0.05 U	**0.112**	0.05 U	**3.24**	**0.472**	**2.65**	**3.9**	**0.537**	1.2 U	**0.301**	1.4 U	**31.5**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	MW15-15	MW15-15	MW16A-15	MW16A-15	MW16A-15	MW17-15	MW17-15	MW17-15	MW17-15	MW19-15	MW19-15	MW19-15	MW1A-15	MW1A-15	MW1A-15	MW20A-15	MW20A-15	MW20A-15	MW20A-15
						Sample ID	S-11102463-102315-LG-303	S-11102463-102315-LG-304	S-11102463-102615-TB-468	S-11102463-102615-TB-469	S-11102463-102615-TB-470	S-11102463-102215-LG-294	S-11102463-102215-LG-295	S-11102463-102215-LG-296	S-11102463-102215-LG-297	S-11102463-102215-LG-298	S-11102463-102215-LG-299	S-11102463-102215-LG-300	S-11102463-081115-LG-233	S-11102463-081115-LG-234	S-11102463-081115-LG-235	S-11102463-082415-DB-607	S-11102463-082415-DB-608	S-11102463-082415-DB-609	S-11102463-082415-DB-610
						Start Depth	6.09	0.76	2.28	3.81	0.76	0.76	2.28	6.85	6.85	0.76	2.28	4.57	0.76	2.28	6.09	0.76	2.29	5.33	3.05
						End Depth	6.7	1.37	2.89	4.41	1.37	1.37	2.89	7.46	7.46	1.37	2.89	5.18	1.37	2.89	6.7	1.37	2.9	5.94	3.66
						Date	23 Oct 2015	23 Oct 2015	26 Oct 2015	26 Oct 2015	26 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**11.9**	**5.5**	**19.1**	**16.2**	**10.8**	**7.01**	**10.9**	**14.5**	**14.9**	**6.6**	**23.6**	**15.1**	**5.45**	**17.8**	**17.1**	**16.9**	**35.7**	**24.1**	**32.6**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.7**	**7.88**	**7.65**	**7.61**	**8.01**	**7.69**	**7.61**	**7.68**	**7.62**	**7.51**	**7.71**	**7.51**	**8.9**	**7.81**	**7.87**	**7.15**	**6.86**	**7.02**	**6.97**
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%				**11.9**	**5.5**	**19.1**	**16.2**	**10.8**	**7.01**	**10.9**	**14.5**	**14.9**	**6.6**	**23.6**	**15.1**								
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	**9.5**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.8**	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.2**	1 U	1 U	1 U	**5.4**	**2.9**	**1.5**	**1.2**	1 U	**1.5**	**1.4**	**1**	**7**	**2.7**	**1.1**	**3.9**	**2.8**	1 U	**2**
INORGANIC	Barium	µg/g	220	390		**22.7**	**8.1**	**5.8**	**5.7**	**154**	**33.4**	**9.8**	**12.2**	**9**	**29.6**	**23.8**	**8**	**37.8**	**11.7**	**12.2**	**55.7**	**59.3**	**16.3**	**59.3**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	**18.9**	**5.3**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**7.8**	**9.6**	5 U	**6.1**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	0.1 U	**0.18**	0.1 U	**3.22**	**0.36**	0.1 U	0.1 U	0.1 U	**1.18**	**1.4**	**0.17**	**0.42**	**0.14**	0.1 U	**2.85**	**4.77**	**0.11**	**2.66**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	**3.86**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.12**	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**7.9**	**5.3**	**3.1**	**3.5**	**80.9**	**10.6**	**5.5**	**10**	**5.9**	**7.1**	**7.6**	**3.9**	**7.7**	**6.1**	**5.7**	**18.4**	**16.6**	**4.6**	**13.4**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.23**	0.2 U	**0.21**	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**2.8**	**1.6**	**1.3**	**1.3**	**5.8**	**4**	**2.3**	**2.8**	**1.7**	**2.5**	**2.8**	**1.9**	**4.3**	**3.4**	**3.5**	**5.7**	**4.5**	**1.9**	**3.7**
INORGANIC	Copper	µg/g	92	140		**6.3**	**1.9**	**2.2**	**2.3**	**116**	**42.9**	**3.4**	**7.1**	**3.7**	**6.1**	**3.6**	**2.4**	**11.2**	**4.8**	**2.5**	**34.2**	**17.4**	**2.4**	**11.8**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																				
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.117**	**0.165**	**0.239**	**0.328**	**0.507**	**0.55**	**0.154**	**0.113**	**0.136**	**0.317**	**0.311**	**0.3**	**0.42**	**0.15**	**0.18**	**0.27**	**0.4**	**0.19**	**0.26**
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**11.8**	**2.5**	**2.6**	**2.6**	**403**	**35.9**	**5.6**	**5.1**	**3.2**	**8.6**	**2.9**	**2.1**	**24.3**	**9.2**	**3.1**	**126**	**24.4**	**1.6**	**16.4**
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0303**	**0.0452**	**0.0493**	**0.0361**	**4.41 D**	**0.41**	**0.0111**	**0.0085**	**0.714**	**0.0279**	**0.0123**	**0.0207**	**0.04**	**0.0094**	**0.0051**	**0.21**	**0.13**	0.005 U	**0.16**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	**5.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2**	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**8.2**	**2.8**	**2.8**	**2.7**	**46.6**	**11**	**4.2**	**7.6**	**4.2**	**5.1**	**5.3**	**3.7**	**8**	**7**	**6.6**	**10.9**	**10.1**	**3.4**	**7.5**
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	**0.37**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**0.28**			**0.24**	**7.14**					**0.55**	**0.94**	**0.41**	**0.32**	**0.53**	**0.31**	**0.82**	**0.42**	**0.66**
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**8.5**	**13.6**	**5.2**	**4.3**	**23**	**19.3**	**10.2**	**10.2**	**7.6**	**12**	**13.8**	**6.5**	**14**	**13.3**	**13.7**	**17.6**	**19.8**	**7.9**	**16**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	**0.132**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**34.9**	**7.8**	**9.1**	**11.5**	**602**	**49.1**	**12.4**	**27.9**	**17.9**	**19.3**	**14.6**	**12.6**	**43.3**	**24.7**	**22.3**	**142**	**56.7**	**8.5**	**31.5**
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW15-15	MW15-15	MW16A-15	MW16A-15	MW16A-15	MW17-15	MW17-15	MW17-15	MW17-15	MW19-15	MW19-15	MW19-15	MW1A-15	MW1A-15	MW1A-15	MW20A-15	MW20A-15	MW20A-15	MW20A-15
					Sample ID	S-11102463-102315-LG-303	S-11102463-102315-LG-304	S-11102463-102615-TB-468	S-11102463-102615-TB-469	S-11102463-102615-TB-470	S-11102463-102215-LG-294	S-11102463-102215-LG-295	S-11102463-102215-LG-296	S-11102463-102215-LG-297	S-11102463-102215-LG-298	S-11102463-102215-LG-299	S-11102463-102215-LG-300	S-11102463-081115-LG-233	S-11102463-081115-LG-234	S-11102463-081115-LG-235	S-11102463-082415-DB-607	S-11102463-082415-DB-608	S-11102463-082415-DB-609	S-11102463-082415-DB-610
					Start Depth	6.09	0.76	2.28	3.81	0.76	0.76	2.28	6.85	6.85	0.76	2.28	4.57	0.76	2.28	6.09	0.76	2.29	5.33	3.05
					End Depth	6.7	1.37	2.89	4.41	1.37	1.37	2.89	7.46	7.46	1.37	2.89	5.18	1.37	2.89	6.7	1.37	2.9	5.94	3.66
					Date	23 Oct 2015	23 Oct 2015	26 Oct 2015	26 Oct 2015	26 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**94.8**	**34.1**	**0.143**	0.042 U	**2.27**	**214**	**21.4**	**0.984**	**0.402**	**0.203**	**0.078**	0.042 U	**3.36**	**0.27**	**0.09**	**9.5**	**3.19**	0.042 U	**0.22**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**38.4 D**	**34.1 D**	**0.143**	0.03 U	**0.924**	**88.6 D**	**10.4**	**0.591**	**0.318**	**0.08**	**0.078**	0.03 U	**1.41**	**0.12**	**0.04**	**3.33**	**1.58**	0.03 U	**0.18**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**56.5 D**	0.25 U	0.03 U	0.03 U	**1.35**	**125 D**	**10.9**	**0.394**	**0.084**	**0.122**	0.03 U	0.03 U	**1.95**	**0.15**	**0.05**	**6.17**	**1.61**	0.03 U	**0.03**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**35.5 D**	**2.3**	**0.06**	0.05 U	**0.875**	**3.78 D**	**0.507**	**0.372**	**0.105**	0.05 U	0.05 U	0.05 U	0.09 U	0.05 U	0.05 U	**0.3**	**3.15**	0.05 U	**0.33**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**2.67**	0.6 U	0.05 U	0.05 U	**0.577**	**0.85 D**	0.15 U	0.05 U	0.05 U	0.06 U	0.05 U	0.05 U	**0.12**	0.05 U	0.05 U	**0.11**	**0.53**	0.05 U	**0.14**
PAH	Anthracene	µg/g	0.22	0.67	0.67	**14.4 D**	**3.07**	0.05 U	0.05 U	**2.5**	**1.33 D**	**0.136**	**0.107**	0.05 U	0.05 U	0.05 U	0.05 U	**0.31**	0.05 U	0.05 U	**0.28**	**2.34**	0.05 U	**0.57**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**6.41**	**0.615**	0.05 U		**3.95**	0.5 U	**0.068**	0.07 U	0.05 U	0.15 U	0.05 U	0.05 U	**0.59**	0.05 U	0.05 U	**0.72**	**2.19**	0.05 U	**1.07**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**4.48**	**0.231**	0.05 U	0.05 U	**3.31**	0.5 U	0.05 U	0.05 U	0.05 U	**0.229**	0.05 U	0.05 U	**0.5**	0.05 U	0.05 U	**0.57**	**1.63**	0.05 U	**0.85**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**3.22**	**0.146**	0.05 U	0.05 U	**3.99**	0.5 U	0.05 U	0.05 U	0.05 U	**0.234**	0.05 U	0.05 U	**0.61**	**0.05**	0.05 U	**0.78**	**1.35**	0.05 U	**0.79**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**1.54**	**0.141**	0.05 U	0.05 U	**2.06**	0.5 U	0.05 U	0.05 U	0.05 U	**0.256**	0.05 U	0.05 U	**0.25**	0.05 U	0.05 U	**0.46**	**0.74**	0.05 U	**0.42**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**1.09**	0.05 U	0.05 U	0.05 U	**1.43**	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.18**	0.05 U	0.05 U	**0.26**	**0.54**	0.05 U	**0.28**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**5.97**	**1.16**	0.05 U	**0.055**	**3.27**	**0.9 D**	**0.12**	**0.063**	0.05 U	**0.24**	0.05 U	0.05 U	**0.6**	**0.06**	0.05 U	**0.82**	**2.25**	0.05 U	**1.16**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.377**	0.05 U	0.05 U	0.05 U	**0.475**	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	**0.1**	**0.21**	0.05 U	**0.11**
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**13.9 D**	**0.626**	**0.054**	**0.098**	**8.32**	**0.79 D**	**0.102**	**0.111**	0.05 U	**0.284**	**0.071**	0.05 U	**1.31**	**0.05**	0.05 U	**1.94**	**4.54**	0.05 U	**2.21**
PAH	Fluorene	µg/g	0.19	62	62	**16.2 D**	**4.22**	**0.124**	0.05 U	**1.82**	**4.05 D**	**0.678**	**0.101**	0.05 U	0.085 U	0.05 U	0.05 U	**0.16**	0.05 U	0.05 U	**0.48**	**1.86**	0.05 U	**0.32**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**1.46**	**0.058**	0.05 U	0.05 U	**2.37**	0.5 U	0.05 U	0.05 U	0.05 U	**0.16**	0.05 U	0.05 U	**0.26**	0.05 U	0.05 U	**0.41**	**0.7**	0.05 U	**0.41**
PAH	Naphthalene	µg/g	0.09	0.6	200	**93 D**	**1.66**	0.05 U	0.05 U	**1.18**	**44.1 D**	**0.684**	**0.694**	**0.168**	**0.07**	0.05 U	0.05 U	**1.58**	**0.09**	0.05 U	**17.7 A**	**2.93**	0.05 U	**0.09**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**46.7 D**	**15.5 D**	**0.17**	**0.168**	**9.05**	**7.15 D**	**1.5**	**0.372**	**0.075**	**0.17**	0.05 U	0.05 U	**1.6**	**0.09**	0.05 U	**2.43**	**9.02**	0.05 U	**1.93**
PAH	Pyrene	µg/g	1	78	2600	**20.2 D**	**4.23**	**0.097**	**0.142**	**6.86**	**2.17 D**	**0.27**	**0.16**	0.05 U	**0.374**	**0.096**	0.05 U	**1.12**	**0.06**	0.05 U	**1.64**	**5.83**	0.05 U	**2.58**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	**16.8**	**730 D**	**89.1**	5 U	5 U	**4640 D**	**44.2**	5 U	5 U	5 U	5 U	5 U	**11.6**	5 U	5 U	**1140 A**	**144 A**	5 U	**12.3**
PHC	F1-BTEX	µg/g	25	55	55	**11.4**	**730**	**89.1**	5 U	5 U	**4470**		5 U	5 U	5 U	5 U	5 U	**8.3**	5 U	5 U	**340**	22 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**536**	**6800**	**228**	**16**	**61**	**6470 D**	**2320**	10 U	10 U	**132**	**19**	**12**	**20**	10 U	10 U	**1210**	**793**	10 U	**49**
PHC	F2-Naphth	µg/g	10	98	230	**443**	**6790**	**228**	**16**	**60**	**6430**	**2320**	10 U	10 U	**132**	**19**	**12**	**19**	10 U	10 U	**1190**	**790**	10 U	**49**
PHC	F3 (C16-C34)	µg/g	240	300		**757**	**4720**	**614**	**66**	**2200**	**6890 D**	**2490**	50 U	50 U	**5080**	**214**	**66**	**214**	**88**	50 U	**2160**	**235**	50 U	**338**
PHC	F3-PAH	µg/g	240	300		**660**	**4700**	**614**	**66**	**2160**	**6880**	**2480**	50 U	50 U	**5080**	**214**	**66**	**208**	**87**	50 U	**2160**	**209**	50 U	**327**
PHC	F4 (C34-C50)	µg/g	120	2800		**105**	**893**	**260**	50 U	**904**	**3060 D**	**1180**	50 U	50 U	**1610**	**99**	50 U	**289**	**99**	50 U	**874**	**68**	50 U	**69**
PHC	F4G-SG	µg/g	120	2800																	**3690**			
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**No**	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**1420**	**13100**	**1190**	**82**	**3160**	**21100**		72 U	72 U	**6820**	**333**	**78**	**536**	**186**	72 U	**5390**	**1240**	72 U	**468**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	13 U	0.65 U	0.05 U	0.05 U	18 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	5 U	1 U	0.05 U	0.05 U	14 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.6 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	MW15-15	MW15-15	MW16A-15	MW16A-15	MW16A-15	MW17-15	MW17-15	MW17-15	MW17-15	MW19-15	MW19-15	MW19-15	MW1A-15	MW1A-15	MW1A-15	MW20A-15	MW20A-15	MW20A-15	MW20A-15
						Sample ID	S-11102463-102315-LG-303	S-11102463-102315-LG-304	S-11102463-102615-TB-468	S-11102463-102615-TB-469	S-11102463-102615-TB-470	S-11102463-102215-LG-294	S-11102463-102215-LG-295	S-11102463-102215-LG-296	S-11102463-102215-LG-297	S-11102463-102215-LG-298	S-11102463-102215-LG-299	S-11102463-102215-LG-300	S-11102463-081115-LG-233	S-11102463-081115-LG-234	S-11102463-081115-LG-235	S-11102463-082415-DB-607	S-11102463-082415-DB-608	S-11102463-082415-DB-609	S-11102463-082415-DB-610
						Start Depth	6.09	0.76	2.28	3.81	0.76	0.76	2.28	6.85	6.85	0.76	2.28	4.57	0.76	2.28	6.09	0.76	2.29	5.33	3.05
						End Depth	6.7	1.37	2.89	4.41	1.37	1.37	2.89	7.46	7.46	1.37	2.89	5.18	1.37	2.89	6.7	1.37	2.9	5.94	3.66
						Date	23 Oct 2015	23 Oct 2015	26 Oct 2015	26 Oct 2015	26 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	22 Oct 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	1.4 U	0.042 U	0.042 U	0.042 U	3.4 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.53**	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	16 U	0.5 U	0.5 U	0.5 U	40 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	16 U	0.7 U	0.5 U	0.5 U	40 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	16 U	0.5 U	0.5 U	0.5 U	52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.81**	**0.6**	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.187**	0.22 U	0.0068 U	0.0068 U	**0.0629**	**2.6 D**	**0.0919**	**0.653**	**0.425**	**0.0228**	0.0068 U	**0.0088**	**0.32**	**0.0073**	**0.0079**	**3.59**	**1.41**	0.0068 U	**0.11**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	11 U	1.2 U	0.05 U	0.05 U	6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.09 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	1.6 U	0.25 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.58**	**0.18**	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.96 U	0.03 U	0.03 U	0.03 U	2.4 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.6 U	**0.03**	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.06 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**3.94**	0.58 U	0.018 U	0.018 U	**0.07**	**40.1 D**	**0.732**	**0.085**	**0.037**	**0.031**	0.018 U	0.018 U	**0.25**	0.018 U	0.018 U	**159 A**	**34.6 A**	0.018 U	**7.47**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	1.6 U	0.05 U	0.05 U	**0.128**	**54.1 D**	**1.23**	**0.253**	0.05 U	0.05 U	0.05 U	0.05 U	**0.17**	0.05 U	0.05 U	**0.78**	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	2.6 U	0.08 U	0.08 U	**0.216**	6.4 U	**0.131**	0.08 U	0.08 U	**0.103**	0.08 U	0.08 U	**1.19**	0.08 U	0.08 U	**62 A**	**6.06**	0.08 U	**0.17**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.16**	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.96 U	0.03 U	0.03 U	0.03 U	2.4 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.32 U	0.01 U	0.01 U	0.01 U	0.8 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.22**	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.64 U	0.02 U	0.02 U	0.02 U	1.6 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.09**	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.667**	0.64 U	0.02 U	0.02 U	**0.178**	**9.3 D**	**0.165**	**0.022**	0.02 U	**0.048**	0.02 U	0.02 U	**0.68**	**0.02**	0.02 U	**114 A**	**26.6 A**	0.02 U	**0.11**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.612**	0.96 U	0.03 U	0.03 U	**0.239**	**114 D**	**1.37**	**0.095**	**0.06**	**0.072**	0.03 U	0.03 U	**0.75**	0.03 U	0.03 U	**460 A**	**81.6 A**	**0.03**	**1.09**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**1.28**	1.2 U	0.05 U	0.05 U	**0.417**	**123**	**1.53**	**0.117**	**0.06**	**0.12**	0.05 U	0.05 U	**1.44**	0.05 U	0.05 U	**573**	**108**	0.05 U	**1.21**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW21A-15	MW21A-15	MW21A-15	MW22-15	MW22-15	MW22-15	MW23A-15	MW23A-15	MW23A-15	MW23A-15	MW25A-15	MW25A-15	MW25A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	081315-LG-243	081315-LG-244	081315-LG-245	111815-KMV-188	111815-KMV-189	111815-KMV-190	081415-LG-249	081415-LG-250	081415-LG-251	081415-LG-252	082415-KMV-133	082415-KMV-134	082415-KMV-135	072815-KMV-101	072815-KMV-102	072815-KMV-103	072815-KMV-104	072815-KMV-105
					Start Depth	3.04	6.09	9.14	0.76	2.28	6.09	4.57	5.33	6.09	8.38	3.05	6.86	9.14	0.76	3.81	6.09	9.14	11.43
					End Depth	3.65	6.7	9.75	1.37	2.89	6.7	5.18	5.94	6.7	8.99	3.66	7.47	9.75	1.37	4.41	6.7	9.75	12.03
					Date	13 Aug 2015	13 Aug 2015	13 Aug 2015	18 Nov 2015	18 Nov 2015	18 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**20.3**	**32.1**	**16.8**	**19.1**	**26.4**	**25.7**	**16.2**	**40.4**	**43.5**	**23.1**	**10.6**	**48.3**	**46.1**	**9.11**	**14.2**	**16.8**	**19.6**	**20.8**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.29**	**6.98**	**7.66**	**7.7**	**7.02**	**7.21**	**7.12**	**7.19**	**6.85**	**7.17**	**7.4**	**7.24**	**7.13**	**7.69**	**7.58**	**7.82**	**7.79**	**7.74**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%							**19.1**	**26.4**	**25.7**											
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		**1.4**	1 U	1 U	**24.1 D**	**486 D**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**7.2**	**2.2**	**1.4**	**33.6 D**	**902 D**	**3.6**	**2.1**	**1.7**	**4.2**	1 U	**5.9**	**1.2**	**1.1**	1 U	**1.3**	1 U	**1.4**	**1.2**
INORGANIC	Barium	µg/g	220	390		**47.8**	**58.2**	**14.6**	**771 D**	**29200 D**	**164**	**36**	**32.6**	**146**	**29.4**	**79.7**	**18.7**	**38.3**	**11.2**	**15.7**	**7.9**	**13.6**	**11.1**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	2 U	**9.8 D**	**0.81**	0.5 U	0.5 U	**0.72**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**7.6**	**10.4**	5 U	100 U	**1000 D**	**6.8**	**6.4**	**5.1**	**11.3**	5 U	**8.9**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**2.35**	**3.04**	**0.61**	**1.08**	**2.56**	**0.11**	**1.16**	**0.41**	**0.54**	**0.39**	**0.68**	**0.5**	**0.35**	0.1 U	**0.16**	0.1 U	**0.1**	**0.18**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	**2.45 D**	**476 D**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**21.5**	**13.8**	**5.4**	**66 D**	**1350 D**	**38.5**	**12.1**	**12.3**	**32.9**	**7.4**	**22.3**	**5.9**	**5.1**	**4.8**	**8.2**	**4.1**	**6.5**	**5.9**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**17.6**	**4.7**	**2**	**9.3 D**	**168 D**	**11.2**	**4.9**	**4.6**	**10.3**	**2.5**	**10.2**	**2.3**	**1.8**	**7**	**3**	**1.7**	**2.8**	**2.3**
INORGANIC	Copper	µg/g	92	140		**85.1**	**12.3**	**3.7**	**564 D**	**73000 D**	**28**	**9.1**	**7.7**	**28.2**	**3.6**	**27.2**	**3.9**	**3.9**	**3.4**	**4.6**	**2.6**	**2.7**	**3.1**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.76**	**0.71**	**0.18**	**3.68**	**2.18**	**0.264**	**0.4**	**0.2**	**0.32**	**0.24**	**0.29**	**0.38**	**0.22**	**1.92**	**0.19**	**0.14**	**0.22**	**0.16**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**14.6**	**6.7**	**3.4**	**2880 D**	**74700 D**	**13.8**	**6.4**	**4.5**	**13.2**	**2.2**	**28.1**	**2.8**	**2.6**	**4.1**	**3.7**	**2.3**	**2.6**	**2.3**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.03**	**0.02**	**0.0053**	**5.93 D**	**10.9 D**	**0.0272**	**0.02**	**0.03**	**0.05**	**0.0053**	**0.06**	**0.0061**	0.005 U	**0.02**	**0.0095**	**0.0053**	0.005 U	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		**2.2**	1 U	1 U	**3.3 D**	**40.6 D**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**29**	**10.4**	**4.3**	**33 D**	**841 D**	**26.1**	**10.1**	**9.3**	**25.1**	**5**	**22.5**	**5**	**4.8**	**12.9**	**5.5**	**3.4**	**4.8**	**3.9**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	**5.9 D**	**195 D**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	**2.9 D**	**744 D**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.41**	**2.08**	**1.04**	**15.9**	**4.9**	**0.69**	**2.14**	**0.63**	**0.51**	**0.29**	**0.47**	**0.47**	**0.2**	**0.14**	**0.37**	**0.32**	**0.62**	**0.49**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	1 U	**3.8 D**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	**12.3 D**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**19.3**	**18.2**	**8.3**	**31.1 D**	**425 D**	**51.7**	**18.3**	**18.2**	**40**	**13.3**	**25.3**	**7.9**	**6.9**	**9**	**16.8**	**5.9**	**12.4**	**9.6**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**44.8**	**28.6**	**12.8**	**1240 D**	**78000 D**	**71.6**	**27.8**	**21.8**	**64.4**	**16.3**	**57.4**	**12.9**	**11.3**	**17.5**	**17.7**	**10.7**	**16.9**	**11**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW21A-15	MW21A-15	MW21A-15	MW22-15	MW22-15	MW22-15	MW23A-15	MW23A-15	MW23A-15	MW23A-15	MW25A-15	MW25A-15	MW25A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	081315-LG-243	081315-LG-244	081315-LG-245	111815-KMV-188	111815-KMV-189	111815-KMV-190	081415-LG-249	081415-LG-250	081415-LG-251	081415-LG-252	082415-KMV-133	082415-KMV-134	082415-KMV-135	072815-KMV-101	072815-KMV-102	072815-KMV-103	072815-KMV-104	072815-KMV-105
					Start Depth	3.04	6.09	9.14	0.76	2.28	6.09	4.57	5.33	6.09	8.38	3.05	6.86	9.14	0.76	3.81	6.09	9.14	11.43
					End Depth	3.65	6.7	9.75	1.37	2.89	6.7	5.18	5.94	6.7	8.99	3.66	7.47	9.75	1.37	4.41	6.7	9.75	12.03
					Date	13 Aug 2015	13 Aug 2015	13 Aug 2015	18 Nov 2015	18 Nov 2015	18 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.27**	0.042 U	0.042 U	**0.402**	**0.57**	0.042 U	**1.68**	0.042 U	0.042 U	0.042 U	**6.28**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.11**	0.03 U	0.03 U	**0.161**	**0.24**	0.03 U	**1.65**	0.03 U	0.03 U	0.03 U	**1.94**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.15**	0.03 U	0.03 U	**0.241**	**0.331**	0.03 U	**0.03**	0.03 U	0.03 U	0.03 U	**4.34**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	0.05 U	**0.168**	**0.29**	0.05 U	**0.16**	**0.07**	**0.17**	0.05 U	0.07 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	**0.511**	**0.257**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.09 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U	0.05 U	**0.464**	**0.337**	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	**0.16**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	0.05 U	0.05 U	**1.38**	**2.24**	0.05 U		0.05 U	**0.21**	0.05 U	**0.2**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	0.05 U	0.05 U	**1.6**	**3.65**	0.05 U	**0.13**	0.05 U	**0.15**	0.05 U	**0.39**	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	0.05 U	0.05 U	**2.09**	**4.6**	0.05 U	**0.11**	0.05 U	**0.12**	0.05 U	**0.42**	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U	0.05 U	**1.48**	**3.45**	0.05 U	**0.1**	0.05 U	**0.08**	0.05 U	**0.36**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	**0.681**	**1.84**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.13**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	0.05 U	0.05 U	**1.44**	**2.4**	0.05 U	**0.12**	**0.05**	**0.23**	0.05 U	**0.28**	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	**0.328**	**0.818**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	**0.08**	0.05 U	**2.41**	**1.77**	0.05 U	**0.19**	**0.07**	**0.37**	0.05 U	**0.22**	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U	0.05 U	**0.204**	**0.463**	0.05 U	**0.15**	0.05 U	**0.12**	0.05 U	**0.09**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U	0.05 U	**1.5**	**3.71**	0.05 U	**0.08**	0.05 U	**0.06**	0.05 U	**0.35**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.12**	0.05 U	0.05 U	**0.684**	**0.32**	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	**2.17**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.06**	**0.08**	0.05 U	**1.72**	**0.729**	0.05 U	**0.11**	**0.09**	**0.53**	0.05 U	**0.96**	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
PAH	Pyrene	µg/g	1	78	2600	0.05 U	**0.08**	0.05 U	**2.42**	**2.35**	0.05 U	**0.26**	**0.09**	**0.53**	0.05 U	**0.34**	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**5.6**	5 U	5 U	**5.8**	**6.8**	5 U	5 U	5 U	5 U	5 U	**13.1**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	**5.2**	**5.9**	5 U	5 U	5 U	5 U	5 U	**10**	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	10 U	**34**	**420**	10 U	**100**	**28**	**38**	**21**	**23**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U	10 U	**33**	**420**	10 U	**100**	**28**	**38**	**21**	**21**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		50 U	50 U	50 U	**684**	**1550**	50 U	**138**	**70**	**340**	50 U	**132**	50 U	50 U	**64**	**61**	50 U	50 U	50 U
PHC	F3-PAH	µg/g	240	300		50 U	50 U	50 U	**670**	**1530**	50 U	**137**	**69**	**338**	50 U	**129**	50 U	50 U	**64**	**61**	50 U	50 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	50 U	**405**	**301**	50 U	50 U	50 U	**64**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
PHC	F4G-SG	µg/g	120	2800																			
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U	72 U	**1130**	**2280**	72 U	**238**	**98**	**442**	72 U	**169**	72 U	72 U	72 U	72 U	72 U	72 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW21A-15	MW21A-15	MW21A-15	MW22-15	MW22-15	MW22-15	MW23A-15	MW23A-15	MW23A-15	MW23A-15	MW25A-15	MW25A-15	MW25A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15	MW26A-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	081315-LG-243	081315-LG-244	081315-LG-245	111815-KMV-188	111815-KMV-189	111815-KMV-190	081415-LG-249	081415-LG-250	081415-LG-251	081415-LG-252	082415-KMV-133	082415-KMV-134	082415-KMV-135	072815-KMV-101	072815-KMV-102	072815-KMV-103	072815-KMV-104	072815-KMV-105
					Start Depth	3.04	6.09	9.14	0.76	2.28	6.09	4.57	5.33	6.09	8.38	3.05	6.86	9.14	0.76	3.81	6.09	9.14	11.43
					End Depth	3.65	6.7	9.75	1.37	2.89	6.7	5.18	5.94	6.7	8.99	3.66	7.47	9.75	1.37	4.41	6.7	9.75	12.03
					Date	13 Aug 2015	13 Aug 2015	13 Aug 2015	18 Nov 2015	18 Nov 2015	18 Nov 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015	28 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.02**	0.0068 U	0.0068 U	**0.1**	**0.257**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.13**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.08**	0.018 U	0.018 U	**0.04**	**0.041**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.4**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	**0.306**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**0.29**	0.08 U	0.08 U	**0.197**	**0.266**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.64**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.26**	0.02 U	0.02 U	**0.074**	**0.066**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.66**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.21**	0.03 U	0.03 U	**0.183**	**0.195**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**1.32**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.47**	0.05 U	0.05 U	**0.257**	**0.261**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.98**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW27A-15	MW27A-15	MW27A-15	MW27A-15	MW27B-15	MW27B-15	MW27B-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28C-15	MW29A-15	MW29A-15	MW29A-15	MW29A-15
					Sample ID	S-11102463-081015-KMV-115	S-11102463-081015-KMV-116	S-11102463-081015-KMV-117	S-11102463-081015-KMV-118	S-11102463-081115-RK-301	S-11102463-081115-RK-302	S-11102463-081115-RK-303	S-11102463-101515-KMV-159	S-11102463-101915-KMV-160	S-11102463-102015-KMV-161	S-11102463-102915-KMV-162	S-11102463-102915-KMV-163	S-11102463-101415-KMV-158	S-11102463-110915-KMV-181	S-11102463-110915-KMV-182	S-11102463-110915-KMV-183	S-11102463-110915-KMV-184
					Start Depth	0.76	3.81	6.09	9.9	0.76	3.81	6.09	8.53	19.2	26.06	3.04	4.57	0.03	0.76	3.04	6.09	6.09
					End Depth	1.37	4.41	6.7	10.51	1.37	4.41	6.7	9.14	19.81	26.67	3.65	5.18	0.6	1.37	3.65	6.7	6.7
					Date	10 Aug 2015	10 Aug 2015	10 Aug 2015	10 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	15 Oct 2015	19 Oct 2015	20 Oct 2015	29 Oct 2015	29 Oct 2015	14 Oct 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																
ABN	2,4-Dinitrophenol	µg/g	2	38	59																
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																
ABN	Phenol	µg/g	0.5	9.4	46																
CHEMISTRY	Ammonia	µg/g																			
CHEMISTRY	Bromide	µg/g																			
CHEMISTRY	Chlorite	µg/g																			
CHEMISTRY	Fluoride	µg/g	110 [c.]																		
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																		
CHEMISTRY	Moisture, percent	%				**7.46**	**17.7**	**18.7**	**18**	**16.8**	**28**	**19.1**	**19.4**	**13.8**	**12.2**	**39.1**	**27.1**	**8.8**	**9.46**	**19.5**	**19.4**	**18.5**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																		
CHEMISTRY	Nitrite (as N)	µg/g																			
Chemistry	ortho-Phosphate	µg/g																			
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**10.37**	**8.12**	**8**	**7.95**	**8.05**	**7.14**	**7.3**	**7.86**	**7.8**	**7.86**	**7.14**	**7.11**	**9.12**	**7.59**	**8.04**	**7.71**	**7.86**
CHEMISTRY	Sulfate	µg/g																			
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																			
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																
GENCHEM	MOISTURE AT LIQUID LIMIT	%												**13.8**	**12.2**	**39.1**	**27.1**		**9.46**	**19.5**	**19.4**	**18.5**
INORGANIC	Aluminum	µg/g	26000 [c.]																		
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	**9.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5.9**	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**7.6**	**1.1**	**1.1**	1 U	**4.6**	**3.6**	**1.1**	1 U	**7.6**	**5.4**	1 U	**1.3**	**3.4**	**3.6**	**2.7**	1 U	1 U
INORGANIC	Barium	µg/g	220	390		**86.8**	**7.8**	**7.1**	**6.4**	**214**	**78.7**	**9.4**	**17.2**	**40.1**	**47.4**	**75.8**	**43.7**	**59.9**	**16.3**	**19.2**	**6.5**	**6.9**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**11**	5 U	5 U	5 U	**9.4**	**6.8**	5 U	5 U	**5.8**	**6.3**	5 U	5 U	**5.3**	5 U	5 U	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.75**	**0.1**	0.1 U	0.1 U	**3.23**	**0.28**	**0.21**	0.1 U	0.1 U	0.1 U	**1.89**	**0.36**	**0.55**	**0.37**	**0.28**	0.1 U	0.1 U
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																		
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																		
INORGANIC	Chromium	µg/g	70	160		**44.8**	**5.4**	**5.1**	**4.2**	**31**	**30.9**	**5.2**	**2.9**	**15.8**	**19.1**	**9.7**	**9.9**	**14.4**	**8.6**	**7.4**	**2.9**	**3.4**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**7.4**	**1.7**	**1.7**	**1.6**	**6.3**	**9.4**	**2**	**1.4**	**6**	**8.7**	**3.2**	**3.3**	**3.3**	**3**	**2.9**	**1.5**	**1.5**
INORGANIC	Copper	µg/g	92	140		**28.3**	**1.8**	**1.8**	**1.7**	**47.6**	**23.4**	**2.4**	**2.3**	**14.8**	**15.1**	**7.6**	**6.1**	**21.8**	**21.8**	**10.2**	**1.9**	**1.7**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**2.23**	**0.52**	**0.3**	**0.21**	**0.74**	**0.32**	**0.22**	**0.238**	**0.32**	**0.254**	**0.304**	**0.218**	**0.598**	**0.399**	**0.243**	**0.107**	**0.111**
INORGANIC	Iron	µg/g	34000 [c.]																		
INORGANIC	Lead	µg/g	120	120		**80.4**	**3.7**	**4.4**	**2**	**222**	**14.7**	**2.5**	**3**	**8.3**	**16.1**	**12.2**	**3.2**	**223**	**59.1**	**4.2**	**2**	**2**
INORGANIC	Magnesium	µg/g	15000 [c.]																		
INORGANIC	Manganese	µg/g	1400 [c.]																		
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.07**	0.005 U	0.005 U	0.005 U	**0.13**	**0.08**	**0.0077**	**0.0064**	**0.0117**	**0.0184**	**0.0178**	**0.01**	**1.77 D**	**0.0534**	**0.0067**	0.005 U	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		**2**	1 U	1 U	1 U	**1.9**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.1**	**1.8**	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**12.5**	**3**	**2.9**	**2.8**	**13.1**	**21.9**	**3.7**	**2.7**	**14.5**	**18**	**6.7**	**6.8**	**10.3**	**7**	**6.9**	**3**	**3.1**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	**0.66**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.95**	**2.6**	**1.87**	**0.52**	**0.86**	**0.7**	**0.38**		**2.26**	**0.66**	**0.84**	**0.69**	**0.18**	**0.35**	**0.23**		**0.16**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**20.6**	**12**	**10.6**	**9.8**	**26.2**	**36.9**	**8.9**	**4.1**	**24.4**	**25.9**	**14.3**	**15.9**	**17.7**	**14**	**12.7**	**4.7**	**5.3**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**67.2**	**9.4**	**10**	**9.7**	**160**	**55.9**	**10.5**	**6.8**	**34.4**	**33.6**	**23.7**	**19.4**	**81.8**	**31.8**	**20.5**	**7.4**	**8**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW27A-15	MW27A-15	MW27A-15	MW27A-15	MW27B-15	MW27B-15	MW27B-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28C-15	MW29A-15	MW29A-15	MW29A-15	MW29A-15
					Sample ID	S-11102463-081015-KMV-115	S-11102463-081015-KMV-116	S-11102463-081015-KMV-117	S-11102463-081015-KMV-118	S-11102463-081115-RK-301	S-11102463-081115-RK-302	S-11102463-081115-RK-303	S-11102463-101515-KMV-159	S-11102463-101915-KMV-160	S-11102463-102015-KMV-161	S-11102463-102915-KMV-162	S-11102463-102915-KMV-163	S-11102463-101415-KMV-158	S-11102463-110915-KMV-181	S-11102463-110915-KMV-182	S-11102463-110915-KMV-183	S-11102463-110915-KMV-184
					Start Depth	0.76	3.81	6.09	9.9	0.76	3.81	6.09	8.53	19.2	26.06	3.04	4.57	0.03	0.76	3.04	6.09	6.09
					End Depth	1.37	4.41	6.7	10.51	1.37	4.41	6.7	9.14	19.81	26.67	3.65	5.18	0.6	1.37	3.65	6.7	6.7
					Date	10 Aug 2015	10 Aug 2015	10 Aug 2015	10 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	15 Oct 2015	19 Oct 2015	20 Oct 2015	29 Oct 2015	29 Oct 2015	14 Oct 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**3.8**	0.042 U	0.042 U	0.042 U	**0.07**	0.042 U	0.042 U	**2.68**	0.042 U	0.042 U	**474**	**0.277**	**1.99**	**38.7**	**8.57**	**3.64**	**3.55**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**1.66 D**	0.03 U	0.03 U	0.03 U	**0.03**	0.03 U	0.03 U	**1.15**	0.03 U	0.03 U	**192 D**	**0.126**	**0.81 D**	**28.8 D**	**7.13**	**1.49**	**1.57**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**2.14 D**	0.03 U	0.03 U	0.03 U	**0.04**	0.03 U	0.03 U	**1.53**	0.03 U	0.03 U	**282 D**	**0.151**	**1.18 D**	**9.91**	**1.44**	**2.15**	**1.99**
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.25 U	0.05 U	0.05 U	0.05 U	**0.12**	**0.12**	**0.08**	**1.36**	0.05 U	0.05 U	**172 D**	**0.123**	0.5 U	**2.87**	**0.276**	**1.32**	**1.27**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	0.05 U	**0.09**	0.05 U	0.05 U	**15.1 D**	0.05 U	0.5 U		0.05 U	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.39 D**	0.05 U	0.05 U	0.05 U	**0.2**	**0.2**	**0.05**	**0.366**	0.05 U	0.05 U	**61.7 D**	0.05 U	**0.74 D**	**0.991**	**0.059**	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.91 D**	0.05 U	0.05 U	0.05 U	**0.44**	**0.47**	**0.07**		0.05 U	0.05 U	**37.4 D**	0.05 U	**1.54 D**	**0.63**	0.05 U	0.05 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.75 D**	0.05 U	0.05 U	0.05 U	**0.39**	**0.44**	**0.05**	**0.157**	0.05 U	0.05 U	**26.7 D**	0.05 U	**1.23 D**	**0.314**	0.05 U	0.05 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**1.04 D**	0.05 U	0.05 U	0.05 U	**0.49**	**0.42**	**0.06**	**0.116**	0.05 U	0.05 U	**18.9 D**	0.05 U	**1.07 D**	**0.314**	0.05 U	0.05 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.57 D**	0.05 U	0.05 U	0.05 U	**0.22**	**0.21**	0.05 U	**0.058**	0.05 U	0.05 U	**9.4 D**	0.05 U	**1.23 D**	**0.279**	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.32 D**	0.05 U	0.05 U	0.05 U	**0.15**	**0.11**	0.05 U	0.05 U	0.05 U	0.05 U	**7 D**	0.05 U	0.5 U		0.05 U	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**1.4 D**	0.05 U	0.05 U	0.05 U	**0.41**	**0.52**	**0.08**	**0.208**	0.05 U	0.05 U	**35.5 D**	0.05 U	**2.07 D**	**1.02**	**0.053**	0.05 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.18 D**	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2.6 D**	0.05 U	0.5 U	**0.052**	0.05 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**1.89 D**	0.05 U	**0.05**	0.05 U	**1**	**0.78**	**0.12**	**0.414**	0.05 U	0.05 U	**68.9 D**	0.05 U	**1.88 D**	**0.847**	**0.106**	0.05 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	**0.34 D**	0.05 U	0.05 U	0.05 U	**0.12**	**0.12**	**0.05**	**0.564**	0.05 U	0.05 U	**92 D**	**0.053**	**0.57 D**	**2.86**	**0.235**	**0.528**	**0.493**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.5 D**	0.05 U	0.05 U	0.05 U	**0.22**	**0.19**	0.05 U	**0.063**	0.05 U	0.05 U	**9.3 D**	0.05 U	**0.78 D**	**0.184**	0.05 U	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**1.31 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.43**	0.05 U	0.05 U	**507 D**	**0.272**	**0.83 D**	**5.33**	**0.667**	**0.913**	**0.902**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**2.62 D**	0.05 U	0.05 U	0.05 U	**0.64**	**0.59**	**0.18**	**1.37**	0.05 U	0.05 U	**226 D**	**0.153**	**2.87 D**	**5.26**	**0.329**	0.05 U	**0.073**
PAH	Pyrene	µg/g	1	78	2600	**1.77 D**	0.05 U	**0.05**	0.05 U	**0.88**	**1.04**	**0.14**	**0.591**	0.05 U	0.05 U	**102 D**	**0.067**	**3.99 D**	**4.18**	**0.137**	0.05 U	0.05 U
PCB	Aroclor 1016	µg/g																				
PCB	Aroclor 1221	µg/g																				
PCB	Aroclor 1232	µg/g																				
PCB	Aroclor 1242	µg/g																				
PCB	Aroclor 1248	µg/g																				
PCB	Aroclor 1254	µg/g																				
PCB	Aroclor 1260	µg/g																				
PCB	Aroclor 1262	µg/g																				
PCB	Aroclor 1268	µg/g																				
PCB	PCB, Total	µg/g	0.3	0.35																		
Perchlorate	Perchlorate	µg/g																				
PHC	F1 (C6-C10)	µg/g	25	55	55	**22.3**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**172 D**	**38.2**	5 U	**288 D**	**400 D**	5 U	**6.1**
PHC	F1-BTEX	µg/g	25	55	55	**17.9**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**112**	**23**	5 U	**284**	**393**	5 U	**5.8**
PHC	F2 (C10-C16)	µg/g	10	98	230	**81**	10 U	10 U	10 U	10 U	10 U	**14**	**46**	**19**	**11**	**1230**	**14**	**232 D**	**7550 D**	**167**	10 U	**15**
PHC	F2-Naphth	µg/g	10	98	230	**79**	10 U	10 U	10 U	10 U	10 U	**14**	**45**	**19**	**11**	**730**	**14**	**231**	**7550**	**167**	10 U	**14**
PHC	F3 (C16-C34)	µg/g	240	300		**777**	50 U	50 U	50 U	**113**	**67**	**157**	**94**	**74**	50 U	**1380**	50 U	**2710 D**	**8780 D**	**223**	50 U	50 U
PHC	F3-PAH	µg/g	240	300		**767**	50 U	50 U	50 U	**108**	**63**	**157**	**91**	**74**	50 U	**883**	50 U	**2700**	**8770**	**222**	50 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		**902**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**172**	50 U	**3010 D**	**2330 D**	**60**	50 U	50 U
PHC	F4G-SG	µg/g	120	2800		**2240**												**8650**				
PHC	**Chrom. to baseline at nC5No**	None				No U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**1780**	72 U	72 U	72 U	**113**	72 U	**171**	**140**	**92**	72 U	**2960**	72 U	**5950**	**18900**	**850**	72 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																				
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.9 U	2 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.2 U	0.2 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	3.5 U	5.5 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW27A-15	MW27A-15	MW27A-15	MW27A-15	MW27B-15	MW27B-15	MW27B-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28A-15	MW28C-15	MW29A-15	MW29A-15	MW29A-15	MW29A-15
					Sample ID	S-11102463-081015-KMV-115	S-11102463-081015-KMV-116	S-11102463-081015-KMV-117	S-11102463-081015-KMV-118	S-11102463-081115-RK-301	S-11102463-081115-RK-302	S-11102463-081115-RK-303	S-11102463-101515-KMV-159	S-11102463-101915-KMV-160	S-11102463-102015-KMV-161	S-11102463-102915-KMV-162	S-11102463-102915-KMV-163	S-11102463-101415-KMV-158	S-11102463-110915-KMV-181	S-11102463-110915-KMV-182	S-11102463-110915-KMV-183	S-11102463-110915-KMV-184
					Start Depth	0.76	3.81	6.09	9.9	0.76	3.81	6.09	8.53	19.2	26.06	3.04	4.57	0.03	0.76	3.04	6.09	6.09
					End Depth	1.37	4.41	6.7	10.51	1.37	4.41	6.7	9.14	19.81	26.67	3.65	5.18	0.6	1.37	3.65	6.7	6.7
					Date	10 Aug 2015	10 Aug 2015	10 Aug 2015	10 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	15 Oct 2015	19 Oct 2015	20 Oct 2015	29 Oct 2015	29 Oct 2015	14 Oct 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015	09 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.34 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.38**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**3.66 D**	**0.836**	**0.215**	**0.147**	**0.142**	**0.0769**	**0.11**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	2 U	4 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.8 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.4 U	1.1 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U		0.09 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.34**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.067**	0.018 U	0.018 U	**40.9 D**	**11.1**	**0.251**	**0.423**	**1.35**	**0.144**	**0.15**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.83**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	**2.85**	**4.24**	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**1.53**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.64 U	0.08 U	**0.18**	**0.595**	**0.524**	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.24 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.08 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.16 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.97**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**8.04 D**	**1.87**	**0.062**	**0.6**	**0.901**	**0.03**	**0.029**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**1.23**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**7.3 D**	**1.47**	**0.166**	**1.72**	**3.54**	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**2.21**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**15.3**	**3.33**	**0.228**	**2.32**	**4.44**	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW2A-15	MW2A-15	MW2A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW31A-15	MW31A-15	MW31A-15	MW31A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15
					Sample ID	S-11102463-080615-LG-216	S-11102463-080615-LG-217	S-11102463-080615-LG-218	S-11102463-081715-DB-601	S-11102463-081715-DB-602	S-11102463-081715-DB-603	S-11102463-081815-DB-604	S-11102463-081815-DB-605	S-11102463-081815-DB-606	S-11102463-081815-RK-315	S-11102463-081815-RK-316	S-11102463-081815-RK-317	S-11102463-081815-RK-318	S-11102463-081915-KMV-127	S-11102463-081915-KMV-128	S-11102463-081915-KMV-129	S-11102463-081915-KMV-130	S-11102463-081915-KMV-131
					Start Depth	0.76	3.81	6.85	0.76	3.04	6.09	13.71	13.71	16.76	4.57	6.09	9.9	12.95	0.76	3.65	3.65	6.09	10.66
					End Depth	1.37	4.41	7.46	1.37	3.65	6.7	14.32	14.32	17.37	5.18	6.7	10.51	13.56	1.37	3.65	3.65	6.7	11.27
					Date	06 Aug 2015	06 Aug 2015	06 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**9.88**	**21.6**	**20.2**	**4.87**	**30.6**	**56.2**	**23**	**18.6**	**16.4**	**9.68**	**43.8**	**19.8**	**17.9**	**13.8**	**43.4**	**42.2**	**51.4**	**14.7**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.5**	**7.63**	**7.66**	**7.64**	**7.23**	**7.09**	**7.54**	**7.73**	**7.62**	**8.11**	**7**	**7.58**	**7.63**	**7.57**	**7.14**	**7**	**7.1**	**7.97**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%																				
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**19.5**	**2.2**	**1.5**	**2.5**	**2.2**	**1**	**1.4**	**1.4**	**1.4**	**1**	**19.3**	1 U	**1.2**	**3.7**	**2.8**	**3.1**	**1.5**	1 U
INORGANIC	Barium	µg/g	220	390		**45.1**	**6.7**	**11.9**	**39.9**	**55.4**	**19.9**	**17.1**	**18.2**	**19.2**	**7**	**120**	**17.5**	**12.8**	**104**	**76.8**	**114**	**151**	**9.9**
INORGANIC	Beryllium	µg/g	2.5	4		**0.64**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.69**	0.5 U	0.5 U	**0.58**	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		**7.9**	5 U	5 U	**6.6**	**8.2**	5 U	5 U	5 U	5 U	5 U	**13.4**	5 U	5 U	**11.9**	**7.7**	**7.5**	**5.5**	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.69**	**0.13**	**0.25**	**0.37**	**1.49**	**0.26**	**0.19**	**0.29**	**0.23**	**0.19**	**1.94**	**1.04**	**0.1**	**0.64**	**0.4**	**0.85**	**0.65**	**0.15**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**6.6**	**4**	**4.8**	**16.8**	**15.2**	**6.5**	**7.5**	**8.3**	**10.9**	**3.1**	**32.7**	**5.6**	**5.5**	**27.1**	**21.7**	**17.7**	**11.8**	**5.2**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**6.3**	**2.2**	**2.5**	**3.4**	**5.9**	**1.7**	**3**	**3.3**	**3.3**	**1.4**	**10**	**1.8**	**2.3**	**9**	**7.1**	**6**	**4.2**	**1.8**
INORGANIC	Copper	µg/g	92	140		**30**	**2.2**	**3**	**16.5**	**13.1**	**2.9**	**3.6**	**4.2**	**4.4**	**2.1**	**26.6**	**2.1**	**2.4**	**25.2**	**15.2**	**13.9**	**10.8**	**2.2**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.8**	**0.27**	**0.22**	**0.27**	**0.42**	**0.21**	**0.14**	**0.13**	**0.15**	**0.37**	**0.57**	**0.2**	**0.17**	**1.82**	**0.39**	**0.77**	**0.33**	**0.12**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**27.1**	**2.6**	**2.9**	**39.9**	**14**	**2.9**	**2.3**	**2.3**	**2.3**	**1.9**	**15.9**	**1.7**	**2.2**	**16.2**	**9.9**	**7.2**	**3.8**	**2.2**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.08**	**0.0058**	**0.0094**	**0.05**	**0.1**	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	**0.06**	0.005 U	0.005 U	**0.02**	**0.05**	**0.02**	**0.01**	0.005 U
INORGANIC	Molybdenum	µg/g	2	6.9		**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**13.2**	**4.3**	**4.7**	**10.1**	**11.6**	**4.3**	**5.5**	**5.9**	**5.8**	**2.8**	**23.8**	**3.3**	**4.1**	**21**	**16**	**13.5**	**9.7**	**3.2**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		**1.7**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**2.64**	**0.59**	**0.36**	**1.37**	**2.17**	**0.3**	**0.51**	**0.4**	**0.81**	**4.06**	**1.15**	**1.48**	**1.77**	**5.62**	**0.57**	**1.58**	**0.16**	**0.52**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**14.1**	**9.4**	**9.7**	**20.8**	**22.7**	**9.5**	**13.2**	**14.4**	**21.4**	**5.8**	**41**	**9.4**	**11.3**	**34.2**	**27.9**	**23.5**	**16.5**	**7.4**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**46.2**	**13.2**	**13.5**	**67.6**	**35.5**	**12.2**	**12.9**	**13.6**	**12.9**	**8.4**	**60.2**	**8.8**	**8.8**	**76.4**	**41.1**	**32.4**	**22.2**	**10**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW2A-15	MW2A-15	MW2A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW31A-15	MW31A-15	MW31A-15	MW31A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-
					Sample ID	080615-LG-216	080615-LG-217	080615-LG-218	081715-DB-601	081715-DB-602	081715-DB-603	081815-DB-604	081815-DB-605	081815-DB-606	081815-RK-315	081815-RK-316	081815-RK-317	081815-RK-318	081915-KMV-127	081915-KMV-128	081915-KMV-129	081915-KMV-130	081915-KMV-131
					Start Depth	0.76	3.81	6.85	0.76	3.04	6.09	13.71	13.71	16.76	4.57	6.09	9.9	12.95	0.76	3.65	3.65	6.09	10.66
					End Depth	1.37	4.41	7.46	1.37	3.65	6.7	14.32	14.32	17.37	5.18	6.7	10.51	13.56	1.37	3.65	3.65	6.7	11.27
					Date	06 Aug 2015	06 Aug 2015	06 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**2.5**	0.042 U	0.042 U	**0.08**	**0.18**	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**1.1 D**	0.03 U	0.03 U	**0.03**	**0.12**	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**1.4 D**	0.03 U	0.03 U	**0.04**	**0.06**	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.03**	0.03 U	0.045 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.5 U	0.05 U	0.05 U	0.05 U	**0.56**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.14**	**0.2**	0.05 U	0.075 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.5 U	0.05 U	0.05 U	0.05 U	**0.14**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	0.05 U	0.075 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.5 U	0.05 U	0.05 U	**0.06**	**0.47**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.16**	**0.28**	0.05 U	0.075 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.5 U	0.05 U	**0.05**	**0.2**	**0.82**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.45**	**0.51**	0.05 U	0.075 U	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.5 U	0.05 U	0.05 U	**0.21**	**0.88**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.45**	**0.52**	0.05 U	0.075 U	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.5 D**	0.05 U	0.05 U	**0.37**	**0.94**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.61**	**0.44**	0.05 U	0.075 U	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.5 U	0.05 U	0.05 U	**0.13**	**0.39**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.23**	**0.24**	0.05 U	0.075 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.5 U	0.05 U	0.05 U	**0.4**	**1.02**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.19**	**0.13**	0.05 U	0.075 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.72 D**	0.05 U	**0.06**	**0.23**	**0.92**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.58**	**0.6**	0.05 U	0.075 U	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.5 U	0.05 U	0.05 U	0.05 U	**0.08**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**0.05**	0.05 U	0.075 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.64 D**	0.05 U	**0.07**	**0.44**	**1.52**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.51**	**0.83**	**0.05**	0.075 U	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	0.5 U	0.05 U	0.05 U	0.05 U	**0.29**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	**0.16**	0.05 U	0.075 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.5 U	0.05 U	0.05 U	**0.12**	**0.33**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.25**	**0.21**	0.05 U	0.075 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.84 D**	0.05 U	0.05 U	0.05 U	**0.23**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.075 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**1.13 D**	0.05 U	0.05 U	**0.3**	**1.49**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	**1.39**	**0.93**	0.05 U	0.075 U	0.05 U
PAH	Pyrene	µg/g	1	78	2600	**0.63 D**	0.05 U	**0.13**	**0.41**	**2**	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.13**	**1.16**	**0.05**	0.075 U	0.05 U
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	**24.1**	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	**18.5**	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	**51**	10 U	10 U	10 U	**12**	15 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**10**	10 U	10 U	15 U	10 U
PHC	F2-Naphth	µg/g	10	98	230	**50**	10 U	10 U	10 U	**12**	15 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	15 U	10 U
PHC	F3 (C16-C34)	µg/g	240	300		**317**	**88**	50 U	**348**	**95**	75 U	50 U	50 U	50 U	50 U	**139**	50 U	50 U	**75**	**52**	**60**	75 U	50 U
PHC	F3-PAH	µg/g	240	300		**314**	**88**	50 U	**346**	**86**	75 U	50 U	50 U	50 U	50 U	**139**	50 U	50 U	**69**	50 U	**60**	75 U	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		**341**	**180**	**50**	**204**	50 U	75 U	50 U	50 U	50 U	50 U	**73**	50 U	50 U	**65**	50 U	50 U	75 U	50 U
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**733**	**267**	72 U	**553**	**107**	110 U	72 U	72 U	72 U	72 U	**212**	72 U	72 U	**150**	72 U	72 U	110 U	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW2A-15	MW2A-15	MW2A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW30A-15	MW31A-15	MW31A-15	MW31A-15	MW31A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15	MW32A-15
					Sample ID	S-11102463-080615-LG-216	S-11102463-080615-LG-217	S-11102463-080615-LG-218	S-11102463-081715-DB-601	S-11102463-081715-DB-602	S-11102463-081715-DB-603	S-11102463-081815-DB-604	S-11102463-081815-DB-605	S-11102463-081815-DB-606	S-11102463-081815-RK-315	S-11102463-081815-RK-316	S-11102463-081815-RK-317	S-11102463-081815-RK-318	S-11102463-081915-KMV-127	S-11102463-081915-KMV-128	S-11102463-081915-KMV-129	S-11102463-081915-KMV-130	S-11102463-081915-KMV-131
					Start Depth	0.76	3.81	6.85	0.76	3.04	6.09	13.71	13.71	16.76	4.57	6.09	9.9	12.95	0.76	3.65	3.65	6.09	10.66
					End Depth	1.37	4.41	7.46	1.37	3.65	6.7	14.32	14.32	17.37	5.18	6.7	10.51	13.56	1.37	3.65	3.65	6.7	11.27
					Date	06 Aug 2015	06 Aug 2015	06 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.54**	0.75 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	**0.72**	0.0068 U	0.0068 U	**0.01**	**0.0097**	0.0001 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0001 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.37**	0.018 U	0.018 U	**0.01**	0.018 U	0.027 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.027 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**1.58**	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	**2.23**	0.08 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**1.01**	0.02 U	0.02 U	**0.04**	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**1.32**	0.03 U	0.03 U	**0.07**	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**2.32**	0.05 U	0.05 U	**0.12**	0.05 U	0.054 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW32A-15	MW33A-15	MW33A-15	MW33A-15	MW34A-15	MW34A-15	MW34A-15	MW34A-15	MW35A-15	MW35A-15	MW35A-15	MW35A-15	MW35B-15	MW35B-15	MW35B-15	MW35D-15	MW36A-15	MW36A-15
					Sample ID	S-11102463-081915-KMV-132	S-11102463-111215-KMV-185	S-11102463-111215-KMV-186	S-11102463-111215-KMV-187	S-11102463-081315-RK-311	S-11102463-081315-RK-312	S-11102463-081315-RK-313	S-11102463-081315-RK-314	S-11102463-081215-KMV-119	S-11102463-081215-KMV-120	S-11102463-081215-KMV-121	S-11102463-081215-KMV-122	S-11102463-081315-LG-246	S-11102463-081315-LG-247	S-11102463-081415-LG-248	S-11102463-082115-LG-272	S-11102463-080515-KMV-111	S-11102463-080515-KMV-112
					Start Depth	12.95	0.76	2.28	7.62	3.81	6.85	9.9	14.47	1.52	6.09	6.09	9.9	0.67	3.04	5.33	10.67	0.76	3.04
					End Depth	13.56	1.37	2.89	8.22	4.41	7.46	10.51	15.08	2.13	6.7	6.7	10.51	1.37	3.65	5.94	11.28	1.37	3.65
					Date	19 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	13 Aug 2015	13 Aug 2015	14 Aug 2015	21 Aug 2015	05 Aug 2015	05 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**19**	**8.36**	**36.9**	**16.8**	**20.1**	**55.4**	**28**	**20.4**	**8.26**	**15.9**	**16**	**18.2**	**15**	**8.01**	**29.4**	**19.9**	**12.1**	**7.72**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.81**	**7.8**	**7.34**	**7.79**	**7.26**	**7.04**	**7.03**	**7.68**	**9.46**	**7.98**	**7.83**	**7.84**	**7.49**	**7.89**	**7.31**	**7.65**	**7.73**	**8.96**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%					**8.36**	**36.9**	**16.8**													
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.1**	**2.2**	**5.2**	1 U	1 U	**2.4**	**1.5**	**1.2**	**2.7**	**1.2**	**1.3**	**1.2**	**3.1**	**4.9**	**2.9**	**1.2**	**1.4**	**6.6**
INORGANIC	Barium	µg/g	220	390		**10.6**	**22.9**	**71.4**	**13.1**	**7.1**	**110**	**42.6**	**18.4**	**36**	**10.9**	**9.4**	**10.6**	**148**	**47.5**	**80.1**	**36.9**	**14**	**31**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.69**	**0.7**	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	**11.2**	5 U	5 U	**11.8**	5 U	5 U	5 U	5 U	5 U	5 U	**10.9**	**14**	**6.8**	5 U	5 U	**5.7**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.12**	**0.24**	**1.54**	0.1 U	**0.12**	**1.97**	**0.39**	**0.14**	**0.4**	0.1 U	0.1 U	0.1 U	**0.44**	**2.32**	**1.22**	0.1 U	0.1 U	**0.36**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**5**	**6.4**	**20.3**	**5.9**	**3.2**	**26.8**	**10.4**	**4.8**	**7.2**	**7.1**	**7.6**	**5.5**	**49.5**	**25.1**	**15.7**	**8.6**	**5.5**	**13.1**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.34**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.9**	**1.9**	**6.2**	**2**	**1.3**	**9**	**3.7**	**2.2**	**2.8**	**1.8**	**2**	**2.2**	**11.6**	**12.7**	**5.2**	**3.4**	**2.6**	**6.8**
INORGANIC	Copper	µg/g	92	140		**3.4**	**17**	**17.2**	**1.5**	**1.9**	**23.6**	**6.1**	**3.1**	**11.2**	**2.1**	**2.1**	**2.6**	**24.8**	**22.8**	**11.7**	**5.4**	**2.8**	**14.8**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.15**	**0.148**		**0.26**	**0.09**	**0.39**	**0.2**	**0.21**	**0.3**	**0.35**	**0.34**	**0.2**	**0.32**	**0.56**	**1.17**	**0.26**	**0.21**	**0.31**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**2.1**	**25**	**16.4**	**1.5**	**2.1**	**7.5**	**2.9**	**2.4**	**27.8**	**2.7**	**2.4**	**2.2**	**7.5**	**9.3**	**38.6**	**4.9**	**6.9**	**40.9**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0056**	**0.0249**	**0.0617**	0.005 U	0.005 U	**0.02**	**0.0067**	0.005 U	**0.02**	0.005 U	**0.0071**	0.005 U	**0.01**	**0.02**	**0.05**	**0.0098**	**0.0062**	**0.02**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**3.5**	**4.7**	**13.9**	**3.7**	**2.7**	**22.5**	**7.1**	**3.9**	**5.5**	**3.1**	**3.3**	**3.7**	**29.9**	**27.4**	**11.4**	**7.8**	**4.6**	**13.5**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.4**	**0.1**	**1.74**	**1.38**	**0.19**	**0.31**	**0.12**	**4.37**	**0.4**	**1.93**	**1.82**	**0.81**	**1.35**	**2.63**	**2.28**	**0.25**	**0.54**	**2.51**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**8.2**	**11.7**	**25.7**	**12.6**	**5.9**	**34.8**	**17.7**	**9.4**	**13.9**	**16.2**	**18.5**	**12.1**	**52.2**	**33.2**	**19.9**	**9.7**	**12.5**	**15**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**8**	**24.4**	**50.6**	**8.6**	**7.2**	**50.1**	**18.9**	**12.2**	**38.2**	**9.6**	**13.4**	**11.3**	**54**	**61**	**53.8**	**20.7**	**13.9**	**52**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	MW32A-15	MW33A-15	MW33A-15	MW33A-15	MW34A-15	MW34A-15	MW34A-15	MW34A-15	MW35A-15	MW35A-15	MW35A-15	MW35A-15	MW35B-15	MW35B-15	MW35B-15	MW35D-15	MW36A-15	MW36A-15
						Sample ID	S-11102463-081915-KMV-132	S-11102463-111215-KMV-185	S-11102463-111215-KMV-186	S-11102463-111215-KMV-187	S-11102463-081315-RK-311	S-11102463-081315-RK-312	S-11102463-081315-RK-313	S-11102463-081315-RK-314	S-11102463-081215-KMV-119	S-11102463-081215-KMV-120	S-11102463-081215-KMV-121	S-11102463-081215-KMV-122	S-11102463-081315-LG-246	S-11102463-081315-LG-247	S-11102463-081415-LG-248	S-11102463-082115-LG-272	S-11102463-080515-KMV-111	S-11102463-080515-KMV-112
						Start Depth	12.95	0.76	2.28	7.62	3.81	6.85	9.9	14.47	1.52	6.09	6.09	9.9	0.67	3.04	5.33	10.67	0.76	3.04
						End Depth	13.56	1.37	2.89	8.22	4.41	7.46	10.51	15.08	2.13	6.7	6.7	10.51	1.37	3.65	5.94	11.28	1.37	3.65
						Date	19 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	13 Aug 2015	13 Aug 2015	14 Aug 2015	21 Aug 2015	05 Aug 2015	05 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	**0.094**	**1.66**	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	**0.42**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.1**	0.042 U	0.042 U	0.042 U	**12.1**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	**0.043**	**1.18**	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	**0.18**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.04**	0.03 U	0.03 U	0.03 U	**4.7 D**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	**0.051**	**0.478**	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	**0.24**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	0.03 U	0.03 U	0.03 U	**7.43 D**
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	**1.07**	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.22**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**8.33 D**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	**0.077**	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.38**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	**0.081**	**0.384**	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.7**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**3.75 D**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	**0.249**		0.05 U		0.075 U	0.05 U	0.05 U	**2.21**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	**0.39**	0.05 U	0.05 U	**1.97 D**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	**0.223**	**0.184**	0.05 U	**0.15**	0.075 U	0.05 U	0.05 U	**2.06**	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	**0.09**	0.05 U	0.05 U	**0.97 D**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																				
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	**0.288**	**0.172**	0.05 U	**0.13**	0.075 U	0.05 U	0.05 U	**2.28**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	**0.14**	0.05 U	0.05 U	**1.16 D**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	**0.136**	**0.071**	0.05 U	**0.12**	0.075 U	0.05 U	0.05 U	**1.24**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**0.05**	0.05 U	0.05 U	0.5 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.73**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.53 D**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	**0.238**	**0.226**	0.05 U	**0.14**	0.075 U	0.05 U	0.05 U	**2.11**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	**0.42**	0.05 U	0.05 U	**1.82 D**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.32**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	**0.524**	**0.385**	0.05 U	**0.18**	0.075 U	0.05 U	0.05 U	**4.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.21**	**0.69**	0.05 U	**0.12**	**10.3 D**
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U	**0.419**	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.27**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**7.38 D**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	**0.176**	**0.08**	0.05 U	**0.09**	0.075 U	0.05 U	0.05 U	**1.26**	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.5 U	
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	**1.62**	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.3**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**6.08 D**
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.05 U	**0.353**	**1.24**	0.05 U	**0.06**	0.075 U	0.05 U	0.05 U	**2.27**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	**0.07**	0.05 U	**0.14**	**18.3 D**
PAH	Pyrene	µg/g	1	78	2600	0.05 U	**0.436**	**0.539**	0.05 U	**0.25**	0.075 U	0.05 U	0.05 U	**4.86**	0.05 U	0.05 U	0.05 U	0.05 U	**0.18**	**0.72**	0.05 U	**0.09**	**6.85 D**	
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	7.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	**109**	10 U	10 U	15 U	10 U	10 U	**15**	10 U	10 U	10 U	10 U	10 U	10 U	**18**	10 U	10 U	**65**
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U	**107**	10 U	10 U	15 U	10 U	10 U	**15**	10 U	10 U	10 U	10 U	10 U	10 U	**18**	10 U	10 U	**59**
PHC	F3 (C16-C34)	µg/g	240	300		50 U	**71**	**398**	50 U	50 U	**109 D**	50 U	50 U	**264**	50 U	50 U	50 U	50 U	50 U	50 U	**153**	50 U	50 U	**504**
PHC	F3-PAH	µg/g	240	300		50 U	**68**	**395**	50 U	50 U	**109**	50 U	50 U	**244**	50 U	50 U	50 U	50 U	50 U	50 U	**151**	50 U	50 U	**464**
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	**80**	50 U	50 U	75 U	50 U	50 U	**278**	50 U	50 U	50 U	50 U	50 U	50 U	**91**	50 U	50 U	**507**
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U	**586**	72 U	72 U	110 U	72 U	72 U	**557**	72 U	72 U	72 U	72 U	72 U	72 U	**263**	72 U	72 U	**1080**
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW32A-15	MW33A-15	MW33A-15	MW33A-15	MW34A-15	MW34A-15	MW34A-15	MW34A-15	MW35A-15	MW35A-15	MW35A-15	MW35A-15	MW35B-15	MW35B-15	MW35B-15	MW35D-15	MW36A-15	MW36A-15
					Sample ID	S-11102463-081915-KMV-132	S-11102463-111215-KMV-185	S-11102463-111215-KMV-186	S-11102463-111215-KMV-187	S-11102463-081315-RK-311	S-11102463-081315-RK-312	S-11102463-081315-RK-313	S-11102463-081315-RK-314	S-11102463-081215-KMV-119	S-11102463-081215-KMV-120	S-11102463-081215-KMV-121	S-11102463-081215-KMV-122	S-11102463-081315-LG-246	S-11102463-081315-LG-247	S-11102463-081415-LG-248	S-11102463-082115-LG-272	S-11102463-080515-KMV-111	S-11102463-080515-KMV-112
					Start Depth	12.95	0.76	2.28	7.62	3.81	6.85	9.9	14.47	1.52	6.09	6.09	9.9	0.67	3.04	5.33	10.67	0.76	3.04
					End Depth	13.56	1.37	2.89	8.22	4.41	7.46	10.51	15.08	2.13	6.7	6.7	10.51	1.37	3.65	5.94	11.28	1.37	3.65
					Date	19 Aug 2015	12 Nov 2015	12 Nov 2015	12 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015	13 Aug 2015	13 Aug 2015	14 Aug 2015	21 Aug 2015	05 Aug 2015	05 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.11 D**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.82 D**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	**0.0083**	0.0068 U	0.0068 U	0.0068 U	0.0001 U	0.0068 U	0.0068 U	**0.02**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.04**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.027 U	0.018 U	0.018 U	**0.03**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.04**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.12 U	0.08 U	0.08 U	**0.11**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.18**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	**0.406**	**0.025**	0.01 U	0.01 U	0.015 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	**0.07**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.11**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.045 U	0.03 U	0.03 U	**0.1**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.11**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.054 U	0.05 U	0.05 U	**0.17**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.23**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW36A-15	MW36A-15	MW37A-15	MW37A-15	MW37A-15	MW37A-15	MW38A-15	MW38A-15	MW38A-15	MW39A-15	MW39A-15	MW39A-15	MW39A-15	MW3A-15	MW3A-15	MW3A-15	MW40A-15	MW40A-15
					Sample ID	S-11102463-080515-KMV-113	S-11102463-080515-KMV-114	S-11102463-081415-KMV-123	S-11102463-081415-KMV-124	S-11102463-081415-KMV-125	S-11102463-081415-KMV-126	S-11102463-110515-KMV-178	S-11102463-110515-KMV-179	S-11102463-110515-KMV-180	S-11102463-082415-RK-319	S-11102463-082415-RK-320	S-11102463-082415-RK-321	S-11102463-082415-RK-322	S-11102463-081115-LG-236	S-11102463-081115-LG-237	S-11102463-081115-LG-238	S-11102463-073015-KMV-106	S-11102463-073015-KMV-107
					Start Depth	6.09	9.14	0.76	2.28	9.14	11.43	1.52	3.04	5.33	0.76	3.05	6.86	9.14	0.76	2.28	6.09	0.76	3.04
					End Depth	6.7	9.75	1.37	2.89	9.75	12.03	2.13	3.65	5.94	1.37	3.66	7.47	9.75	1.37	2.89	6.7	1.37	3.65
					Date	05 Aug 2015	05 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	30 Jul 2015	30 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																	
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																	
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																	
ABN	2,4-Dinitrophenol	µg/g	2	38	59																	
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																	
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																	
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																	
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																	
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																	
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																	
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																	
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																	
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																	
ABN	Phenol	µg/g	0.5	9.4	46																	
CHEMISTRY	Ammonia	µg/g																				
CHEMISTRY	Bromide	µg/g																				
CHEMISTRY	Chlorite	µg/g																				
CHEMISTRY	Fluoride	µg/g	110 [c.]																			
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			
CHEMISTRY	Moisture, percent	%				**19**	**17.8**	**13.9**	**17.4**	**21.7**	**17.4**	**13.3**	**15.6**	**17.3**	**18.3**	**46.3**	**36.9**	**19.3**	**10.4**	**18.2**	**16.6**	**14**	**39.4**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																			
CHEMISTRY	Nitrite (as N)	µg/g																				
Chemistry	ortho-Phosphate	µg/g																				
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.96**	**7.99**	**8.08**	**7.68**	**7.2**	**7.56**	**7.68**	**7.72**	**7.37**	**7.11**	**6.99**	**6.88**	**7.41**	**8.01**	**7.9**	**7.53**	**7.63**	**7.04**
CHEMISTRY	Sulfate	µg/g																				
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																				
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																	
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																	
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																	
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																	
GENCHEM	MOISTURE AT LIQUID LIMIT	%										**13.3**	**15.6**	**17.3**								
INORGANIC	Aluminum	µg/g	26000 [c.]																			
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		**1.1**	**1.2**	**1.2**	**1**	**1.5**	**1**	**1.4**	**1.8**	1 U	**2.1**	**1.7**	**1.5**	**1.4**	1 U	1 U	**1.3**	**7.1**	**6.1**
INORGANIC	Barium	µg/g	220	390		**7.6**	**8.4**	**10.4**	**6.5**	**14.9**	**8.3**	**11.3**	**12.1**	**8.8**	**61**	**48**	**101**	**33.7**	**6.9**	**8.1**	**15.7**	**71.7**	**125**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.11**	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**6.1**	5 U	5 U	5 U	5 U	**20.5**	**11.1**
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		0.1 U	**0.11**	**0.26**	0.1 U	**0.12**	0.1 U	**0.45**	**0.12**	0.1 U	**2.64**	**0.97**	**0.53**	0.1 U	0.1 U	**0.23**	**0.3**	**0.86**	**0.79**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																			
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																			
INORGANIC	Chromium	µg/g	70	160		**6.6**	**9.6**	**4.3**	**3.8**	**6.8**	**4.3**	**5.5**	**4.9**	**4.9**	**6.5**	**14**	**21.5**	**8**	**4.8**	**5.5**	**8.1**	**35.6**	**36.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**1.9**	**2.1**	**1.8**	**1.4**	**2.2**	**1.6**	**2.4**	**1.9**	**1.9**	**2.7**	**4.1**	**7**	**3.6**	**1.8**	**2.1**	**2.8**	**20.3**	**8.9**
INORGANIC	Copper	µg/g	92	140		**1.6**	**1.8**	**2.8**	**1.6**	**5.1**	**1.9**	**3.6**	**3.5**	**3**	**12.8**	**10.9**	**16.1**	**5.9**	**1.9**	**2.1**	**4.7**	**26.2**	**31.4**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.27**	**0.27**	**0.29**	**0.15**	**0.29**	**0.11**	**0.183**	**0.191**	**0.163**	**0.31**	**0.33**	**0.21**	**0.11**	**0.15**	**0.23**	**0.3**	**0.3**	**0.41**
INORGANIC	Iron	µg/g	34000 [c.]																			
INORGANIC	Lead	µg/g	120	120		**2.2**	**2.1**	**5.1**	**2.7**	**54**	**3.6**	**3**	**26**	**5**	**295**	**20.4**	**11.9**	**3.9**	**2.2**	**2.7**	**4.3**	**5.7**	**37**
INORGANIC	Magnesium	µg/g	15000 [c.]																			
INORGANIC	Manganese	µg/g	1400 [c.]																			
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	0.005 U	0.005 U	**0.0072**	0.005 U	**0.03**	0.005 U	**0.0062**	**0.0267**	0.005 U	**0.23**	**0.04**	**0.04**	**0.0061**	0.005 U	**0.0056**	**0.01**	**0.01**	**0.31**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**3.3**	**3.5**	**3.4**	**2.6**	**4.5**	**2.8**	**4.2**	**3.9**	**4.3**	**5.7**	**9.4**	**16.3**	**8.1**	**3.1**	**3.5**	**5.4**	**41.4**	**20.2**
INORGANIC	Phosphorus	µg/g	1500 [c.]																			
INORGANIC	Potassium	µg/g	4900 [c.]																			
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.24**
INORGANIC	Sodium	µg/g	180 [c.]																			
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.6**	**0.51**	**0.56**	**0.9**	**1.62**	**0.31**				**1.64**	**0.53**	**0.13**		**0.84**	**0.91**	**1.38**	**0.7**	**0.92**
INORGANIC	Strontium	µg/g	77 [c.]																			
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																			
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**14.8**	**16.5**	**9.6**	**10.2**	**12.8**	**8.3**	**12**	**8.9**	**7.7**	**11.7**	**17.8**	**29.7**	**13.1**	**12.2**	**13.4**	**15.2**	**46.5**	**34.5**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**8.1**	**8.2**	**13.6**	**8.4**	**17.4**	**8.6**	**9.9**	**20.7**	**13.6**	**155**	**30.8**	**42.7**	**19.5**	**9.1**	**10.4**	**16.4**	**81.1**	**105**
METAL	Zirconium	µg/g	48 [e.]																			

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW36A-15	MW36A-15	MW37A-15	MW37A-15	MW37A-15	MW37A-15	MW38A-15	MW38A-15	MW38A-15	MW39A-15	MW39A-15	MW39A-15	MW39A-15	MW3A-15	MW3A-15	MW3A-15	MW40A-15	MW40A-15
					Sample ID	S-11102463-080515-KMV-113	S-11102463-080515-KMV-114	S-11102463-081415-KMV-123	S-11102463-081415-KMV-124	S-11102463-081415-KMV-125	S-11102463-081415-KMV-126	S-11102463-110515-KMV-178	S-11102463-110515-KMV-179	S-11102463-110515-KMV-180	S-11102463-082415-RK-319	S-11102463-082415-RK-320	S-11102463-082415-RK-321	S-11102463-082415-RK-322	S-11102463-081115-LG-236	S-11102463-081115-LG-237	S-11102463-081115-LG-238	S-11102463-073015-KMV-106	S-11102463-073015-KMV-107
					Start Depth	6.09	9.14	0.76	2.28	9.14	11.43	1.52	3.04	5.33	0.76	3.05	6.86	9.14	0.76	2.28	6.09	0.76	3.04
					End Depth	6.7	9.75	1.37	2.89	9.75	12.03	2.13	3.65	5.94	1.37	3.66	7.47	9.75	1.37	2.89	6.7	1.37	3.65
					Date	05 Aug 2015	05 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	30 Jul 2015	30 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	0.042 U	0.042 U	0.042 U	**0.84**	**0.1**	**0.245**	**1.21**	**0.329**	**0.66**	**0.51**	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.1**	**0.58**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	0.03 U	0.03 U	**0.79**	**0.1**	**0.095**	**1.15**	**0.329**	**0.26**	**0.45**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.04**	**0.45**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	0.03 U	**0.15**	**0.056**	0.03 U	**0.4**	**0.05**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	**0.12**
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	0.05 U	0.05 U	**0.54**	**0.08**	0.05 U	**0.934**	**0.154**	**0.82**	**1.17**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**1.07**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	0.05 U	0.05 U	0.05 U	0.05 U	**7.15**	**0.14**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.19**
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U	0.05 U	0.05 U	**0.36**	**0.08**	0.05 U	**0.227**	0.05 U	**24.4 A**	**0.82**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.9**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	0.05 U	**0.12**	0.05 U	**0.35**	**0.07**	0.05 U	**0.259**	0.05 U	**113 A**	**0.75**	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	**1.11**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	0.05 U	**0.13**	0.05 U	**0.26**	**0.05**	0.05 U	**0.184**	0.05 U	**86.9 A**	**0.54**	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	**0.77**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	0.05 U	**0.14**	0.05 U	**0.21**	**0.05**	0.05 U	**0.205**	0.05 U	**105 A**	**0.51**	0.05 U	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	**0.73**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U	**0.1**	0.05 U	**0.11**	0.05 U	0.05 U	**0.092**	0.05 U	**33.7 A**	**0.25**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.36**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	**37.8 A**	**0.19**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.2**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	0.05 U	**0.15**	0.05 U	**0.38**	**0.09**	0.05 U	**0.267**	0.05 U	**103 A**	**0.75**	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	**1.15**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**13.8 A**	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.06**	0.05 U	**0.21**	0.05 U	**0.57**	**0.12**	0.05 U	**0.756**	0.05 U	**205 A**	**1.91**	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	0.05 U	**2.32**
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U	0.05 U	0.05 U	**0.35**	**0.06**	**0.054**	**0.386**	0.05 U	**3.13**	**0.69**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.69**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U	**0.08**	0.05 U	**0.1**	0.05 U	0.05 U	**0.097**	0.05 U	**43.4 A**	**0.24**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.34**
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	0.05 U	0.05 U	**0.28**	**0.05**	**0.101**	**0.337**	0.05 U	**0.64**	**0.13**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.22**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.07**	0.05 U	**0.15**	0.05 U	**1.34**	**0.31**	0.05 U	**0.759**	**0.067**	**42.9 A**	**3.37**	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	**3.31**
PAH	Pyrene	µg/g	1	78	2600	**0.05**	0.05 U	**0.23**	0.05 U	**0.85**	**0.19**	**0.136**	**0.862**	0.05 U	**171 A**	**2.07**	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**	0.05 U	**2.91**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	**6.4**	5 U	160 U	**7.1**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	**6.3**	5 U	160 U	**6.7**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	10 U	10 U	**77**	10 U	**504**	**21**	10 U	**29**	**53**	10 U	10 U	10 U	10 U	10 U	10 U	**53**
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U	10 U	10 U	**77**	10 U	**503**	**20**	10 U	**28**	**53**	10 U	10 U	10 U	10 U	10 U	10 U	**53**
PHC	F3 (C16-C34)	µg/g	240	300		50 U	50 U	**329**	50 U	**171**	50 U	**516**	**94**	50 U	**1500**	**315**	50 U	50 U	**51**	50 U	50 U	50 U	**288**
PHC	F3-PAH	µg/g	240	300		50 U	50 U	**328**	50 U	**168**	50 U	**515**	**90**	50 U	**679**	**305**	50 U	50 U	**51**	50 U	50 U	50 U	**276**
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	**662**	50 U	**51**	50 U	**91**	50 U	50 U	**584**	**65**	50 U	50 U	**106**	50 U	**65**	50 U	**68**
PHC	F4G-SG	µg/g	120	2800				**1340**							**1500**								
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes	Yes	**No**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U	**991**	72 U	**306**	72 U	**1110**	**121**	72 U	**2110**	**433**	72 U	72 U	**157**	72 U	72 U	72 U	**409**
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW36A-15	MW36A-15	MW37A-15	MW37A-15	MW37A-15	MW37A-15	MW38A-15	MW38A-15	MW38A-15	MW39A-15	MW39A-15	MW39A-15	MW39A-15	MW3A-15	MW3A-15	MW3A-15	MW40A-15	MW40A-15
					Sample ID	S-11102463-080515-KMV-113	S-11102463-080515-KMV-114	S-11102463-081415-KMV-123	S-11102463-081415-KMV-124	S-11102463-081415-KMV-125	S-11102463-081415-KMV-126	S-11102463-110515-KMV-178	S-11102463-110515-KMV-179	S-11102463-110515-KMV-180	S-11102463-082415-RK-319	S-11102463-082415-RK-320	S-11102463-082415-RK-321	S-11102463-082415-RK-322	S-11102463-081115-LG-236	S-11102463-081115-LG-237	S-11102463-081115-LG-238	S-11102463-073015-KMV-106	S-11102463-073015-KMV-107
					Start Depth	6.09	9.14	0.76	2.28	9.14	11.43	1.52	3.04	5.33	0.76	3.05	6.86	9.14	0.76	2.28	6.09	0.76	3.04
					End Depth	6.7	9.75	1.37	2.89	9.75	12.03	2.13	3.65	5.94	1.37	3.66	7.47	9.75	1.37	2.89	6.7	1.37	3.65
					Date	05 Aug 2015	05 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	14 Aug 2015	05 Nov 2015	05 Nov 2015	05 Nov 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	11 Aug 2015	11 Aug 2015	11 Aug 2015	30 Jul 2015	30 Jul 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	1.4 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	**0.01**	0.0068 U	**0.01**	0.0068 U	0.22 U	**0.169**	**0.0196**	**0.01**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.96 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	**0.06**	0.018 U	0.58 U	**0.056**	0.018 U	**0.01**	**0.02**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U	1.6 U	**0.071**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	2.6 U	0.08 U	0.08 U	**0.1**	**0.13**	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.96 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.32 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.6 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.64 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.02 U	**0.02**	0.02 U	0.64 U	0.02 U	0.02 U	**0.06**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	0.03 U	**0.05**	0.03 U	0.96 U	**0.099**	0.03 U	**0.06**	**0.03**	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U	1.2 U	**0.099**	0.05 U	**0.12**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW40A-15	MW40A-15	MW40A-15	MW41-15	MW41-15	MW41-15	MW5A-15	MW5A-15	MW5A-15	MW6A-15	MW6A-15	MW6A-15	MW7A-15	MW7A-15	MW7A-15	MW8A-15	MW8A-15	MW8A-15
					Sample ID	S-11102463-073015-KMV-108	S-11102463-073015-KMV-109	S-11102463-073015-KMV-110	S-11102463-110315-KMV-164	S-11102463-110315-KMV-165	S-11102463-110315-KMV-166	S-11102463-081315-PH-404	S-11102463-081315-PH-405	S-11102463-081315-PH-406	S-11102463-080515-LG-210	S-11102463-080515-LG-211	S-11102463-080515-LG-212	S-11102463-080515-LG-213	S-11102463-080515-LG-214	S-11102463-080515-LG-215	S-11102463-081215-RK-304	S-11102463-081215-RK-305	S-11102463-081215-RK-306
					Start Depth	6.85	9.14	11.43	0.76	2.28	4.57	0.76	2.28	6.09	0.76	3.04	6.85	0.76	3.04	6.09	0.76	3.81	6.09
					End Depth	7.46	9.75	12.03	1.37	2.89	5.18	1.34	2.89	6.7	1.37	3.65	7.46	1.37	3.65	6.7	1.37	4.41	6.7
					Date	30 Jul 2015	30 Jul 2015	30 Jul 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**22.9**	**21**	**16.7**	**16.5**	**39.3**	**69**	**3.15**	**15.5**	**28.2**	**9.14**	**17.5**	**19**	**12**	**17.3**	**16.5**	**14.3**	**21.7**	**18.8**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.2**	**7.68**	**7.6**	**7.56**	**7.14**	**6.55**	**8.13**	**7.95**	**7.12**	**7.87**	**7.96**	**7.82**	**7.43**	**7.86**	**7.89**	**10.07**	**7.3**	**7.89**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%							**16.5**	**39.3**	**69**												
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.5**	1 U	1 U
INORGANIC	Arsenic	µg/g	18	18		1 U	**1.5**	**1.2**	**1.8**	**1.6**	**2.2**	**1.7**	**1**	**1.8**	**1.1**	1 U	1 U	**19**	**1.4**	**1.1**	**3.7**	**2**	**1.1**
INORGANIC	Barium	µg/g	220	390		**21**	**14.8**	**16.9**	**22.1**	**37.2**	**152**	**14.3**	**9.3**	**95**	**7.2**	**5.8**	**6.2**	**11.6**	**7.1**	**6.8**	**72.3**	**26.1**	**9.9**
INORGANIC	Beryllium	µg/g	2.5	4		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	5 U	**8.9**	**6.7**	5 U	**7.4**	5 U	5 U	5 U	5 U	5 U	5 U	**9.4**	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.12**	0.1 U	**0.18**	**0.54**	**1.09**	**1.28**	**0.98**	0.1 U	**0.42**	0.1 U	0.1 U	0.1 U	**0.14**	0.1 U	0.1 U	**0.33**	**0.3**	**0.48**
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**6.3**	**5.1**	**6.5**	**9.4**	**9.8**	**24.5**	**8.7**	**5.1**	**15.3**	**4.5**	**4.8**	**5.7**	**7.8**	**6.5**	**6.1**	**18.6**	**12.7**	**6.6**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.22**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22		**2.6**	**2.3**	**2.5**	**4.5**	**3.7**	**6**	**4.2**	**1.7**	**5.4**	**2.2**	**2.1**	**2.2**	**6.8**	**3.4**	**2.5**	**7.4**	**3.9**	**2**
INORGANIC	Copper	µg/g	92	140		**3**	**3**	**3**	**7**	**5.3**	**18.9**	**6.7**	**2.5**	**11.1**	**1.8**	**1.7**	**1.6**	**7.3**	**3**	**2.4**	**31.8**	**26**	**2.4**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.15**	**0.11**	**0.11**	**0.204**	**0.319**	**0.328**	**0.62**	**0.1**	**1.19**	**0.15**	**0.2**	**0.19**	**2.42**	**0.49**	**0.25**	**0.58**	**0.3**	**0.23**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**2.7**	**2.6**	**2**	**4**	**2.9**	**8.1**	**3.6**	**2.4**	**4.3**	**2.2**	**1.9**	**2**	**6.9**	**2.6**	**2.1**	**35.6**	**9.5**	**2.3**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.0057**	0.005 U	0.005 U	**0.0788**	**0.0111**	**0.0251**	**0.0067**	0.005 U	**0.01**	0.005 U	0.005 U	0.005 U	**0.0093**	**0.01**	0.005 U	**0.04**	**0.08**	**0.0072**
INORGANIC	Molybdenum	µg/g	2	6.9		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Nickel	µg/g	82	100		**5.1**	**4.5**	**4.3**	**8**	**7.1**	**20.6**	**8.4**	**3.2**	**11.3**	**4.2**	**4.5**	**4.4**	**12**	**4.8**	**3.8**	**15.5**	**7.9**	**3.7**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.25**	**0.27**	**0.2**	**0.5**	**0.69**	**1.93**		**0.54**	**3.15**	**2.35**	**1.12**	**1.07**	**0.43**	**4.51**	**2.43**	**1.74**	**0.59**	**1.05**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86		**10.5**	**7**	**13.1**	**16.7**	**15.6**	**34**	**16.2**	**12.2**	**21.9**	**10.5**	**12.9**	**15.1**	**18.7**	**18.7**	**15.6**	**17.9**	**15.4**	**9.7**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.099**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340		**16.8**	**14.7**	**11.9**	**19.2**	**17.8**	**41.6**	**22.1**	**11**	**27**	**7.6**	**8.2**	**8.4**	**32.4**	**13.6**	**8.4**	**57.7**	**29.4**	**8.8**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW40A-15	MW40A-15	MW40A-15	MW41-15	MW41-15	MW41-15	MW5A-15	MW5A-15	MW5A-15	MW6A-15	MW6A-15	MW6A-15	MW7A-15	MW7A-15	MW7A-15	MW8A-15	MW8A-15	MW8A-15
					Sample ID	S-11102463-073015-KMV-108	S-11102463-073015-KMV-109	S-11102463-073015-KMV-110	S-11102463-110315-KMV-164	S-11102463-110315-KMV-165	S-11102463-110315-KMV-166	S-11102463-081315-PH-404	S-11102463-081315-PH-405	S-11102463-081315-PH-406	S-11102463-080515-LG-210	S-11102463-080515-LG-211	S-11102463-080515-LG-212	S-11102463-080515-LG-213	S-11102463-080515-LG-214	S-11102463-080515-LG-215	S-11102463-081215-RK-304	S-11102463-081215-RK-305	S-11102463-081215-RK-306
					Start Depth	6.85	9.14	11.43	0.76	2.28	4.57	0.76	2.28	6.09	0.76	3.04	6.85	0.76	3.04	6.09	0.76	3.81	6.09
					End Depth	7.46	9.75	12.03	1.37	2.89	5.18	1.34	2.89	6.7	1.37	3.65	7.46	1.37	3.65	6.7	1.37	4.41	6.7
					Date	30 Jul 2015	30 Jul 2015	30 Jul 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																	
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																	
OCP	Hexachloroethane	µg/g	0.01	0.089	22																	
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																				
other SVOC	2-Chloronaphthalene	µg/g																				
other SVOC	2-Hexanone	µg/g																				
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																				
other SVOC	4-Chlorophenyl Phenylether	µg/g																				
other SVOC	Bis (2-chloroethoxy) methane	µg/g																				
other SVOC	Butyl benzyl phthalate	µg/g																				
other SVOC	Chloroethane	µg/g																				
other SVOC	Chloromethane	µg/g																				
other SVOC	Di-N-Butylphthalate	µg/g																				
other SVOC	Di-n-octyl phthalate	µg/g																				
other SVOC	Isophorone	µg/g																				
other SVOC	Nitrobenzene	µg/g																				
other SVOC	N-Nitrosodi-N-propylamine	µg/g																				
other SVOC	N-Nitrosodiphenylamine	µg/g																				
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	0.042 U	0.042 U	0.042 U	0.042 U	**0.174**	0.085 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	**0.1**	0.042 U	0.042 U	**0.42**	**0.8**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	0.03 U	0.03 U	**0.174**	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.04**	0.03 U	0.03 U	**0.17**	**0.8**	**0.03**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.06**	0.03 U	0.03 U	**0.25**	0.03 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U	0.05 U	0.05 U	**0.069**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**1.15**	**0.09**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	**0.16**	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U	0.05 U	**0.053**	**0.061**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.13**	**0.64**	**0.08**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.05 U	0.05 U	0.05 U	**0.197**	**0.054**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.28**	**0.7**	**0.07**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.05 U	0.05 U	0.05 U	**0.192**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.23**	**0.56**	**0.05**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.05 U	0.05 U	0.05 U	**0.177**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.35**	**0.49**	**0.06**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U	0.05 U	**0.099**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.17**	**0.25**	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U	0.05 U	**0.062**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.09**	**0.12**	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.05 U	0.05 U	0.05 U	**0.188**	**0.066**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.48**	**0.73**	**0.08**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	**0.06**	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	0.05 U	0.05 U	0.05 U	**0.193**	**0.168**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	**0.58**	**1.02**	**0.18**
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U	0.05 U	0.05 U	**0.068**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.13**	**0.58**	**0.06**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U	0.05 U	**0.083**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	**0.23**	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.34**	0.05 U	**0.05**
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.05 U	0.05 U	0.05 U	0.05 U	**0.195**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.84**	**2.02**	**0.26**
PAH	Pyrene	µg/g	1	78	2600	0.05 U	0.05 U	0.05 U	**0.354**	**0.197**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U	0.05 U	**0.68**	**1.46**	**0.18**
PCB	Aroclor 1016	µg/g																				
PCB	Aroclor 1221	µg/g																				
PCB	Aroclor 1232	µg/g																				
PCB	Aroclor 1242	µg/g																				
PCB	Aroclor 1248	µg/g																				
PCB	Aroclor 1254	µg/g																				
PCB	Aroclor 1260	µg/g																				
PCB	Aroclor 1262	µg/g																				
PCB	Aroclor 1268	µg/g																				
PCB	PCB, Total	µg/g	0.3	0.35																		
Perchlorate	Perchlorate	µg/g																				
PHC	F1 (C6-C10)	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**7**	5 U	5 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**5.9**	5 U	5 U
PHC	F2 (C10-C16)	µg/g	10	98	230	10 U	10 U	10 U	10 U	**56**	**23 D**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**14**	**17**	10 U
PHC	F2-Naphth	µg/g	10	98	230	10 U	10 U	10 U	10 U	**56**	**23**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**14**	**17**	10 U
PHC	F3 (C16-C34)	µg/g	240	300		50 U	50 U	50 U	50 U	**233**	**110 D**	**115**	50 U	50 U	50 U	50 U	50 U	**282**	50 U	50 U	**506**	**96**	50 U
PHC	F3-PAH	µg/g	240	300		50 U	50 U	50 U	50 U	**232**	**110**	**115**	50 U	50 U	50 U	50 U	50 U	**282**	50 U	50 U	**503**	**89**	50 U
PHC	F4 (C34-C50)	µg/g	120	2800		50 U	50 U	50 U	50 U	50 U	100 U	**278**	50 U	50 U	50 U	50 U	50 U	**551**	50 U	50 U	**123**	50 U	50 U
PHC	F4G-SG	µg/g	120	2800														**1750**					
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No U	Yes	Yes	Yes	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				72 U	72 U	72 U	72 U	**288**	140 U	**393**	72 U	72 U	72 U	72 U	72 U	**834**	72 U	72 U	**650**	**113**	72 U
SVOC	Hexachlorocyclopentadiene	µg/g																				
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.05 U	0.05 U	0.07 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW40A-15	MW40A-15	MW40A-15	MW41-15	MW41-15	MW41-15	MW5A-15	MW5A-15	MW5A-15	MW6A-15	MW6A-15	MW6A-15	MW7A-15	MW7A-15	MW7A-15	MW8A-15	MW8A-15	MW8A-15
					Sample ID	S-11102463-073015-KMV-108	S-11102463-073015-KMV-109	S-11102463-073015-KMV-110	S-11102463-110315-KMV-164	S-11102463-110315-KMV-165	S-11102463-110315-KMV-166	S-11102463-081315-PH-404	S-11102463-081315-PH-405	S-11102463-081315-PH-406	S-11102463-080515-LG-210	S-11102463-080515-LG-211	S-11102463-080515-LG-212	S-11102463-080515-LG-213	S-11102463-080515-LG-214	S-11102463-080515-LG-215	S-11102463-081215-RK-304	S-11102463-081215-RK-305	S-11102463-081215-RK-306
					Start Depth	6.85	9.14	11.43	0.76	2.28	4.57	0.76	2.28	6.09	0.76	3.04	6.85	0.76	3.04	6.09	0.76	3.81	6.09
					End Depth	7.46	9.75	12.03	1.37	2.89	5.18	1.34	2.89	6.7	1.37	3.65	7.46	1.37	3.65	6.7	1.37	4.41	6.7
					Date	30 Jul 2015	30 Jul 2015	30 Jul 2015	03 Nov 2015	03 Nov 2015	03 Nov 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	05 Aug 2015	12 Aug 2015	12 Aug 2015	12 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.085 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.9 D**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.0157**	0.014 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	**0.02**	0.0068 U	**0.01**	**0.23**	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.05 U	0.05 U	**0.113**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.036 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	**0.05**	**0.06**	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U	0.05 U	0.05 U	**0.054**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.15**	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.16 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	**0.1**	0.08 U	**0.19**	**0.31**	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.04 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.05**	0.02 U	**0.11**	**0.19**	0.02 U	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.06 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	**0.06**	0.03 U	**0.13**	**0.29**	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.072 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.11**	0.05 U	**0.24**	**0.49**	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW8A-15	MW8A-15	MW8A-15	MW8A-15	MW9A-15	MW9A-15	MW9A-15	MW9A-15	OHE BH1/MW2	OHE BH10	OHE BH2	OHE BH3/MW3	OHE BH4	OHE BH4	OHE BH5/MW1	OHE BH6	OHE BH7/MW4	OHE BH7/MW4	OHE BH9
					Sample ID	S-11102463-081215-RK-307	S-11102463-081715-TB-414	S-11102463-081715-TB-415	S-11102463-081715-TB-416	S-11102463-081815-TB-427	S-11102463-081815-TB-428	S-11102463-081815-TB-429	S-11102463-081815-TB-430	BH1/MW2	BH10	BH2	BH3/MW3	BH4 D	BH4 S	BH5/MW1	BH6	BH7/MW4	BH7/MW4	BH9
					Start Depth	0.76	1.52	4.57	6.85	1.52	1.52	5.33	6.09	1.8	2.4	2.4	0.6	1.8	0	0.6	1.8	1.8	3	1.2
					End Depth	1.37	2.13	5.18	7.46	2.13	2.13	5.94	6.7	2.4	3	3	1.2	2.4	0.6	1.2	2.4	2.4	3.6	1.8
					Date	12 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	10 Jun 2009	10 Aug 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Aug 2009	10 Aug 2009	10 Aug 2009
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43									0.007 U		0.007 U	0.007 U	0.007 U		0.007 U	0.007 U	0.007 U		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																			**8.14**	
CHEMISTRY	Moisture, percent	%				**10.3**	**24**	**69.9**	**19.6**	**13.3**	**14.6**	**27.9**	**21.6**										
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**11.17**	**7.57**	**6.91**	**7.71**	**7.64**	**7.63**	**7.18**	**7.32**										
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5		**2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U							1.6 U		1.6 U	
INORGANIC	Arsenic	µg/g	18	18		**7.4**	**1.9**	**3.5**	**1.2**	**3**	**2**	**1.6**	**1.6**							**0.69**		**6.69**	
INORGANIC	Barium	µg/g	220	390		**150**	**21.4**	**72.4**	**10.3**	**9.8**	**10.2**	**37**	**33.9**							**6.8**		**64.3**	
INORGANIC	Beryllium	µg/g	2.5	4		**0.99**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							0.39 U		0.39 U	
INORGANIC	Boron	µg/g	36	120		**53.9**	5 U	**16.3**	5 U	5 U	5 U	**5.6**	**5.5**									**1.16**	
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**2.54**	**0.43**	**7.38**	0.1 U	**0.13**	0.1 U	**0.42**	**0.5**										
INORGANIC	Cadmium	µg/g	1.2	1.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							0.39 U		0.39 U	
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160		**714**	**10**	**14.2**	**3.9**	**4.6**	**4.8**	**11.1**	**10.9**							**2.2**		**12.4**	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.86**	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U										
INORGANIC	Cobalt	µg/g	22	22		**4.7**	**3.8**	**4.2**	**2.1**	**8.9**	**10.1**	**4**	**3.9**							**1.4**		**6.2**	
INORGANIC	Copper	µg/g	92	140		**39.5**	**6.4**	**12.5**	**2.8**	**5.3**	**3.6**	**7.5**	**6.9**							**2.6**		**26.3**	
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02																	1 U	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**3.1**	**1.01**	**0.47**	**0.11**	**2.64**	**2.01**	**0.73**	**0.75**									**0.3**	
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120		**80.4**	**8.5**	**6**	**2.7**	**7.6**	**118**	**5.2**	**3.7**							**4.19**		**61.7**	
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.19**	**0.02**	**0.02**	0.005 U	**0.007**	**0.01**	**0.01**	**0.0091**									**0.03**	
INORGANIC	Molybdenum	µg/g	2	6.9		**1.4**	1 U	**1**	1 U	1 U	1 U	1 U	1 U							0.5 U		0.5 U	
INORGANIC	Nickel	µg/g	82	100		**16.2**	**6.9**	**11.9**	**4**	**12.1**	**14**	**8**	**7.9**							**3.59**		**12.5**	
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4		**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U							0.79 U		0.79 U	
INORGANIC	Silver	µg/g	0.5	20		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U							0.39 U		0.39 U	
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.68**	**9.73**	**1.34**	**0.25**	**0.9**	**0.92**	**2.18**	**2.03**									**1.93**	
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							0.39 U		0.39 U	
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23		**1.3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U										
INORGANIC	Vanadium	µg/g	86	86		**89.3**	**17.7**	**20.4**	**6.6**	**9.3**	**10.3**	**18.7**	**18.2**							**4.19**		**20.4**	
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	**0.11**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
INORGANIC	Zinc	µg/g	290	340		**64.2**	**19.2**	**32.1**	**10.5**	**61.6**	**63.5**	**24.5**	**24.8**							**8.1**		**74.4**	
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW8A-15	MW8A-15	MW8A-15	MW8A-15	MW9A-15	MW9A-15	MW9A-15	MW9A-15	OHE BH1/MW2	OHE BH10	OHE BH2	OHE BH3/MW3	OHE BH4	OHE BH4	OHE BH5/MW1	OHE BH6	OHE BH7/MW4	OHE BH7/MW4	OHE BH9
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-											
					Sample ID	081215-RK-307	081715-TB-414	081715-TB-415	081715-TB-416	081815-TB-427	081815-TB-428	081815-TB-429	081815-TB-430	BH1/MW2	BH10	BH2	BH3/MW3	BH4 D	BH4 S	BH5/MW1	BH6	BH7/MW4	BH7/MW4	BH9
					Start Depth	0.76	1.52	4.57	6.85	1.52	1.52	5.33	6.09	1.8	2.4	2.4	0.6	1.8	0	0.6	1.8	1.8	3	1.2
					End Depth	1.37	2.13	5.18	7.46	2.13	2.13	5.94	6.7	2.4	3	3	1.2	2.4	0.6	1.2	2.4	2.4	3.6	1.8
					Date	12 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	10 Jun 2009	10 Aug 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Aug 2009	10 Aug 2009	10 Aug 2009
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g											0.47 U		0.47 U	0.47 U	0.47 U		0.47 U	0.47 U	0.47 U		
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g											0.005 U		0.005 U	0.005 U	0.005 U		0.005 U	0.005 U	0.005 U		
other SVOC	Chloromethane	µg/g											0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**10.1**	0.042 U	**6.87**	**0.65**	0.042 U	0.042 U	0.042 U	0.042 U										
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**3.94 D**	0.03 U	**3.25 D**	**0.28**	0.03 U	0.03 U	0.03 U	0.03 U										
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**6.2 D**	0.03 U	**3.62 D**	**0.36**	0.03 U	0.03 U	0.03 U	0.03 U										
PAH	Acenaphthene	µg/g	0.072	7.9	560	**4.27 D**	0.05 U	**2.61 D**	**0.2**	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.78 D**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Anthracene	µg/g	0.22	0.67	0.67	**7.57 D**	0.05 U	**0.22 D**	0.05 U	0.05 U	0.05 U	**0.05**	0.05 U										
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**7.59 D**	**0.09**	0.1 U	0.05 U	0.05 U	0.05 U	**0.14**	0.05 U										
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**5.76 D**	**0.11**	0.1 U	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U										
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**7.5 D**	**0.09**	**0.11 D**	0.05 U	0.05 U	0.05 U	**0.08**	0.05 U										
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**3.19 D**	**0.05**	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**2.1 D**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**7 D**	**0.11**	**0.14 D**	0.05 U	0.05 U	0.05 U	**0.16**	0.05 U										
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.93 D**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**21.6 D**	**0.09**	**0.41 D**	0.05 U	0.05 U	0.05 U	**0.31**	**0.05**										
PAH	Fluorene	µg/g	0.19	62	62	**7.27 D**	0.05 U	**0.45 D**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**3.7 D**	0.05 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Naphthalene	µg/g	0.09	0.6	200	**17.9 D**	0.05 U	**28.6 D**	**0.31**	0.05 U	0.05 U	0.05 U	0.05 U										
PAH	Phenanthrene	µg/g	0.69	6.2	270	**29.6 D**	0.05 U	**1.19 D**	0.05 U	0.05 U	0.05 U	**0.09**	0.05 U										
PAH	Pyrene	µg/g	1	78	2600	**16.2 D**	**0.24**	**0.51 D**	0.05 U	0.05 U	0.05 U	**0.41**	**0.08**										
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35									0.04 U		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U		
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**7.1**	5 U	**21 D**	5 U	5 U	5 U	5 U	5 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	**14**	4.99 U	4.99 U
PHC	F1-BTEX	µg/g	25	55	55	5 U	5 U	15 U	5 U	5 U	5 U	5 U	5 U											
PHC	F2 (C10-C16)	µg/g	10	98	230	**70**	10 U	**106 D**	10 U	10 U	10 U	**11**	10 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U	**280**	9.99 U	9.99 U
PHC	F2-Naphth	µg/g	10	98	230	**52**	10 U	**77**	10 U	10 U	10 U	**11**	10 U											
PHC	F3 (C16-C34)	µg/g	240	300		**542**	50 U	**260 D**	50 U	50 U	50 U	**82**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	**779.99**	50 U	50 U
PHC	F3-PAH	µg/g	240	300		**447**	50 U	**260**	50 U	50 U	50 U	**81**	50 U											
PHC	F4 (C34-C50)	µg/g	120	2800		**275**	50 U	**110 D**	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U		50 U
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes											
PHC	Total Hydrocarbons (C6-C50)	µg/g				**894**	72 U	**490**	72 U	72 U	72 U	**93**	72 U											
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.004 U		0.004 U	0.004 U	0.004 U		0.004 U	0.004 U	0.004 U		
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	MW8A-15	MW8A-15	MW8A-15	MW8A-15	MW9A-15	MW9A-15	MW9A-15	MW9A-15	OHE BH1/MW2	OHE BH10	OHE BH2	OHE BH3/MW3	OHE BH4	OHE BH4	OHE BH5/MW1	OHE BH6	OHE BH7/MW4	OHE BH7/MW4	OHE BH9
						S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-	S-11102463-											
					Sample ID	081215-RK-307	081715-TB-414	081715-TB-415	081715-TB-416	081815-TB-427	081815-TB-428	081815-TB-429	081815-TB-430	BH1/MW2	BH10	BH2	BH3/MW3	BH4 D	BH4 S	BH5/MW1	BH6	BH7/MW4	BH7/MW4	BH9
					Start Depth	0.76	1.52	4.57	6.85	1.52	1.52	5.33	6.09	1.8	2.4	2.4	0.6	1.8	0	0.6	1.8	1.8	3	1.2
					End Depth	1.37	2.13	5.18	7.46	2.13	2.13	5.94	6.7	2.4	3	3	1.2	2.4	0.6	1.2	2.4	2.4	3.6	1.8
					Date	12 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	18 Aug 2015	10 Jun 2009	10 Aug 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Jun 2009	10 Aug 2009	10 Aug 2009	10 Aug 2009
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U	0.13 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.04 U		0.04 U	0.04 U	0.04 U		0.04 U	0.04 U	0.04 U		
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.04 U		0.04 U	0.04 U	0.04 U		0.04 U	0.04 U	0.04 U		
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U		0.13 U	0.13 U	0.13 U		0.13 U	0.13 U	0.13 U		
VOC	Benzene	µg/g	0.02	0.21	14	**0.42**	**0.008**	**0.08 D**	**0.29**	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.003 U		0.003 U	0.003 U	0.003 U		0.003 U	0.003 U	0.003 U		
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.003 U		0.003 U	0.003 U	0.003 U		0.003 U	0.003 U	0.003 U		
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	**0.78**	**0.56**	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U											
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U		0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U		
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.13**	0.018 U	**4.57 D**	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.004 U		0.004 U	0.004 U	0.004 U		0.004 U	0.004 U	0.004 U		
VOC	n-Hexane	µg/g	0.05	2.8	54	**0.27**	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U											
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Toluene	µg/g	0.2	2.3	68	**1.02**	0.08 U	0.24 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.003 U		0.003 U	0.003 U	0.003 U		0.003 U	0.003 U	0.003 U		
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U	0.09 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.003 U		0.003 U	0.003 U	0.003 U		0.003 U	0.003 U	0.003 U		
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.01 U	0.01 U	0.03 U	0.01 U	**0.05**	**0.02**	0.01 U	0.01 U	0.004 U		0.004 U	0.004 U	0.004 U		0.004 U	0.004 U	0.004 U		
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U	0.15 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.004 U		0.004 U	0.004 U	0.004 U		0.004 U	0.004 U	0.004 U		
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U	0.06 U	0.02 U	0.02 U	0.02 U	**0.16**	**0.21**	0.002 U		0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U		
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.24**	0.02 U	**4.05 D**	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U											
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.51**	0.03 U	**5.62 D**	**0.09**	0.03 U	0.03 U	0.03 U	0.03 U											
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.76**	0.05 U	**9.67**	**0.12**	0.05 U	0.05 U	0.05 U	0.05 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	S and P BH2	S and P BH3	S and P BH3	S and P BH4	S and P BH5	S and P BH6	S and P BH6	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102
					Sample ID	H2 - SS3	H3 - SS1	H3 - SS1B	H4 - SS1	H5 - SS1	H6 - SS1	H6 - SS2	BH101 0-2'	BH101 10-12'	BH101 16-18'	BH101 18-20'	BH101 2-4'	BH101 4-6'	BH101 6-8'	BH102 0-2	BH102 10-12	BH102 2-4	BH102 4-6	BH102 6-8	BH102 8-10
					Start Depth	1.5	0.3	0.4	0	0	0.8	0.8	0	3.05	4.88	5.49	0.61	1.22	1.83	0	3.05	0.61	1.22	1.83	2.44
					End Depth	2.4	0.4	1.5	0.6	0.6	1.5	1.5	0.61	3.66	5.49	6.1	1.22	1.83	2.44	0.61	3.66	1.22	1.83	2.44	3.05
					Date	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]				**7.51**		**8.79**	**7.59**		**7.29**													
CHEMISTRY	Moisture, percent	%											**2.7**	**37**	**27**	**16**	**3.7**	**11**	**34**	**8.9**	**30**	**3.2**	**39**	**34**	**17**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]										**7.97**				**7.46**	**7.86**		**6.83**		**8.04**	**7.53**		
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5			1 U		1 U	1 U		**1**	**0.2**				**0.2**	**0.2**		**0.38**		**0.2**	**0.6**		
INORGANIC	Arsenic	µg/g	18	18			1 U		**1**	**1**		**1**	**6.3**				**14**	**1**		**9.9**		**1.3**	**2.5**		
INORGANIC	Barium	µg/g	220	390			**29.1**		**36.2**	**287.99**		**59.5**	**82**				**11**	**25**		**36**		**6.6**	**44**		
INORGANIC	Beryllium	µg/g	2.5	4			0.3 U		0.3 U	**0.3**		**0.3**	**0.33**				**1**	**0.2**		**0.24**		**0.2**	**0.2**		
INORGANIC	Boron	µg/g	36	120			0.5 U		**0.5**	**0.5**		**0.5**													
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5									**0.18**				**0.05**	**0.21**		**0.44**		**0.06**	**1.6**		
INORGANIC	Cadmium	µg/g	1.2	1.2			0.3 U		**0.3**	**0.3**		**0.3**	**0.1**				**0.97**	**0.1**		**0.16**		**0.1**	**0.14**		
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160			**19.5**		**66.29**	**18.1**		**21.8**	**6.8**				**3.4**	**8**		**16**		**2.9**	**12**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8									**0.2**				**0.8**	**0.2**		**0.4**		**0.2**	**0.4**		
INORGANIC	Cobalt	µg/g	22	22			**2.3**		**4**	**5.2**		**9.7**	**2.7**				**71**	**2.2**		**2.3**		**2.1**	**4.1**		
INORGANIC	Copper	µg/g	92	140			**15.5**		**17.6**	**8.99**		**16.6**	**5.1**				**63**	**8**		**19**		**2.5**	**21**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		0.09 U		0.09 U	**0.09**		**0.09**	**0.01**				**0.01**	**0.01**		**0.01**		**0.01**	**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**5.25**		**2.079**	**2.89**		**5.85**	**0.78**				**2.4**	**0.36**		**1.5**		**0.35**	**0.93**		
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120			**82**		**35.99**	**61**		**11**	**10**				**4.6**	**11**		**16**		**3.8**	**26**		
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		0.01 U		**0.01**	**0.01**		**0.01**	**0.05**				**0.05**	**0.1**		**0.05**		**0.05**	**0.17**		
INORGANIC	Molybdenum	µg/g	2	6.9			1 U		**1**	**1**		**1**	**1.1**				**0.5**	**0.5**		**1.6**		**0.5**	**0.5**		
INORGANIC	Nickel	µg/g	82	100			**4**		**4.99**	**4.99**		**13**	**4.9**				**73**	**4.8**		**6.1**		**2.4**	**8.7**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4			1 U		1 U	1 U		**1**	**0.5**				**0.5**	**0.5**		**1.5**		**0.5**	**0.5**		
INORGANIC	Silver	µg/g	0.5	20			0.19 U		**0.19**	**0.19**		**0.19**	**0.2**				**0.2**	**0.2**		**0.2**		**0.2**	**0.26**		
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**2.9**		**35.13**	**36.23**		**26.27**	**1.3**				**0.32**	**1**		**0.38**		**0.43**	**2**		
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1									**0.05**				**0.05**	**0.05**		**0.21**		**0.05**	**0.05**		
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86			**15.9**		**19.3**	**19.8**		**25.1**	**7.1**				**6.3**	**11**		**15**		**8.9**	**14**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340			**90.59**		**45.8**	**141**		**42.3**	**26**				**120**	**30**		**49**		**8.7**	**56**		
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	S and P BH2	S and P BH3	S and P BH3	S and P BH4	S and P BH5	S and P BH6	S and P BH6	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102
					Sample ID	H2 - SS3	H3 - SS1	H3 - SS1B	H4 - SS1	H5 - SS1	H6 - SS1	H6 - SS2	BH101 0-2'	BH101 10-12'	BH101 16-18'	BH101 18-20'	BH101 2-4'	BH101 4-6'	BH101 6-8'	BH102 0-2	BH102 10-12	BH102 2-4	BH102 4-6	BH102 6-8	BH102 8-10
					Start Depth	1.5	0.3	0.4	0	0	0.8	0.8	0	3.05	4.88	5.49	0.61	1.22	1.83	0	3.05	0.61	1.22	1.83	2.44
					End Depth	2.4	0.4	1.5	0.6	0.6	1.5	1.5	0.61	3.66	5.49	6.1	1.22	1.83	2.44	0.61	3.66	1.22	1.83	2.44	3.05
					Date	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76												**0.14**			**0.01**					**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76												**0.005**			**0.01**					**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.007 U		0.007 U	0.007 U		0.007 U						**0.23**			**0.18**					**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.007 U		0.007 U	0.007 U		0.007 U						**0.01**			**0.16**					**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.007 U		0.007 U	0.007 U		0.007 U						**0.29**			**0.42**					**0.005**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	0.007 U		**0.09**	0.007 U		**0.03**						**0.05**			**0.65**					**0.01**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.007 U		**0.07**	0.007 U		**0.09**						**0.02**			**0.53**					**0.005**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78													**0.02**			**0.5**					**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.007 U		**0.18**	0.007 U		**0.11**														
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.007 U		0.007 U	0.007 U		0.007 U						**0.02**			**0.23**					**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.007 U		**0.18**	0.007 U		**0.02**						**0.01**			**0.17**					**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11	0.007 U		**0.04**	0.007 U		**0.03**						**0.04**			**0.59**					**0.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.007 U		0.007 U	0.007 U		0.007 U						**0.02**			**0.07**					**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.02**		**0.11**	**0.02**		**0.09**						**0.15**			**1.1**					**0.0056**
PAH	Fluorene	µg/g	0.19	62	62	0.007 U		0.007 U	0.007 U		0.007 U						**0.23**			**0.17**					**0.005**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.007 U		0.007 U	0.007 U		0.007 U						**0.02**			**0.21**					**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200	0.007 U		0.007 U	**0.03**		0.007 U						**0.01**			**0.02**					**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270	0.007 U		0.007 U	0.007 U		**0.01**						**0.89**			**0.11**					**0.0063**
PAH	Pyrene	µg/g	1	78	2600	**0.02**		**0.13**	**0.04**		**0.13**						**0.18**			**1.5**					**0.007**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g				**0.05**		**0.82**	**0.12**		**0.6**														
PHC	F1 (C6-C10)	µg/g	25	55	55									**10**	**10**						**10**			**160**	
PHC	F1-BTEX	µg/g	25	55	55									**10**	**10**						**10**			**160**	
PHC	F2 (C10-C16)	µg/g	10	98	230									**10**	**10**						**140**			**830**	
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300										**38**	**10**						**720**			**2800**	
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800										**10**	**10**						**49**			**250**	
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None												Yes	Yes						Yes			Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37												**0.002**								**0.002**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8												**0.002**								**0.002**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48												**0.002**								**0.002**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120												**0.002**								**0.002**
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600												**0.002**								**0.002**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11												**0.002**								**0.002**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86												**0.002**								**0.002**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60												**0.002**								**0.002**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180												**0.002**								**0.002**
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	S and P BH2	S and P BH3	S and P BH3	S and P BH4	S and P BH5	S and P BH6	S and P BH6	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH101	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102	SLR BH102
					Sample ID	H2 - SS3	H3 - SS1	H3 - SS1B	H4 - SS1	H5 - SS1	H6 - SS1	H6 - SS2	BH101 0-2'	BH101 10-12'	BH101 16-18'	BH101 18-20'	BH101 2-4'	BH101 4-6'	BH101 6-8'	BH102 0-2	BH102 10-12	BH102 2-4	BH102 4-6	BH102 6-8	BH102 8-10
					Start Depth	1.5	0.3	0.4	0	0	0.8	0.8	0	3.05	4.88	5.49	0.61	1.22	1.83	0	3.05	0.61	1.22	1.83	2.44
					End Depth	2.4	0.4	1.5	0.6	0.6	1.5	1.5	0.61	3.66	5.49	6.1	1.22	1.83	2.44	0.61	3.66	1.22	1.83	2.44	3.05
					Date	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	05 Aug 1997	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76										**0.002**									**0.002**
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59										**0.002**									**0.002**
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59										**0.002**									**0.002**
VOC	2-Butanone	µg/g	0.5	16	230										**0.03**									**0.04**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150										**0.03**									**0.03**
VOC	Acetone	µg/g	0.5	16	16										**0.1**									**0.2**
VOC	Benzene	µg/g	0.02	0.21	14								**0.02**	**0.02**	**0.003**					**0.02**			**0.03**	**0.002**
VOC	Bromodichloromethane	µg/g	0.05	13	50										**0.002**									**0.002**
VOC	Bromoform	µg/g	0.05	0.27	21										**0.002**									**0.002**
VOC	Bromomethane	µg/g	0.05	0.05	1.4										**0.003**									**0.003**
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3										**0.002**									**0.002**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4										**0.002**									**0.002**
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48										**0.002**									**0.002**
VOC	Chloroform	µg/g	0.05	0.05	9.5										**0.002**									**0.002**
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130										**0.002**									**0.002**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05											**0.002**									**0.002**
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4										**0.003**									**0.003**
VOC	Ethylbenzene	µg/g	0.05	2	17								**0.02**	**0.02**	**0.002**					**0.02**			**0.51**	**0.002**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220										**0.002**									**0.002**
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66										**0.002**									**0.002**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18										**0.002**									**0.002**
VOC	Toluene	µg/g	0.2	2.3	68								**0.02**	**0.02**	**0.007**					**0.02**			**0.12**	**0.009**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220										**0.002**									**0.002**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05											**0.002**									**0.002**
VOC	Trichloroethylene	µg/g	0.05	0.061	300										**0.002**									**0.002**
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270										**0.002**									**0.002**
VOC	Xylene, o	µg/g	0.05	3.1	26								**0.02**	**0.02**	**0.003**					**0.02**			**0.06**	**0.004**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26								**0.04**	**0.04**	**0.009**					**0.04**			**0.14**	**0.01**
VOC	Xylenes, Total	µg/g	0.05	3.1	26								**0.04**	**0.04**	**0.01**					**0.04**			**0.2**	**0.01**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH105	SLR BH105	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH107	SLR BH107	SLR BH107
					Sample ID	BH103 0-2'	BH103 10-12'	BH103 12-14'	BH103 14-16'	BH103 2-4'	BH103 4-6'	BH103 8-10'	BH105 0-4'	BH105 4-8'	BH106 0-4'	BH106 12-19'	BH106 19-24'	BH106 19-24'-102308	BH106 24-28'	BH106 4-8'	BH106 8-12'	BH107 0-4'	BH107 11-16'	BH107 11-16'-102308
					Start Depth	0	3.05	3.66	4.27	0.61	1.22	2.44	0	1.22	0	3.66	5.79	5.79	7.32	1.22	2.44	0	3.35	3.35
					End Depth	0.61	3.66	4.27	4.88	1.22	1.83	3.05	1.22	2.44	1.22	5.79	7.32	7.32	8.53	2.44	3.66	1.22	4.88	4.88
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**4.9**	**28**	**11**	**11**	**14**	**17**	**32**	**4.7**	**12**	**5.9**	**16**	**17**	**16**	**13**	**10**	**11**	**5.9**	**17**	**20**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.95**				**6.61**	**6.01**		**7.69**	**7.65**	**9.56**					**7.7**		**8.01**	**7.43**	
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																			**1200**		
INORGANIC	Antimony	µg/g	1.3	7.5		**0.42**				**1.2**	**0.26**		**0.41**	**0.2**	**0.45**					**0.2**		**0.2**	**0.2**	
INORGANIC	Arsenic	µg/g	18	18		**7.2**				**130**	**220**		**5**	**5.1**	**5.9**					**1.9**		**1.2**	**1**	
INORGANIC	Barium	µg/g	220	390		**67**				**76**	**34**		**49**	**17**	**42**					**17**		**13**	**6.2**	
INORGANIC	Beryllium	µg/g	2.5	4		**0.45**				**0.37**	**0.2**		**0.25**	**0.2**	**0.2**					**0.2**		**0.2**	**0.2**	
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.15**				**0.17**	**0.26**		**0.42**	**0.11**	**0.27**					**0.16**		**0.05**	**0.18**	
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.39**				**0.27**	**0.1**		**0.11**	**0.1**	**0.11**					**0.1**		**0.1**	**0.1**	
INORGANIC	Calcium	µg/g	49000 [c.]																			**45000**		
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**8.4**				**8.1**	**5.7**		**5**	**4.3**	**4.7**					**4**		**5**	**2.8**	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**				**0.2**	**0.8**		**0.2**	**0.2**	**1**					**0.2**		**0.2**	**0.2**	
INORGANIC	Cobalt	µg/g	22	22		**3.1**				**4.4**	**0.91**		**3.3**	**2.5**	**2.6**					**3.6**		**1.8**	**1.4**	
INORGANIC	Copper	µg/g	92	140		**25**				**81**	**11**		**10**	**5.2**	**15**					**5.7**		**4.8**	**2**	
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**				**0.01**	**0.01**		**0.01**	**0.01**	**0.01**					**0.01**		**0.01**	**0.01**	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**2.5**				**2.8**	**2.4**		**0.37**	**1.1**	**0.73**					**0.22**		**0.2**	**0.21**	
INORGANIC	Iron	µg/g	34000 [c.]																			**3100**		
INORGANIC	Lead	µg/g	120	120		**85**				**78**	**16**		**42**	**14**	**30**					**12**		**12**	**1.6**	
INORGANIC	Magnesium	µg/g	15000 [c.]																			**2100**		
INORGANIC	Manganese	µg/g	1400 [c.]																			**91**		
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**				**0.28**	**0.09**		**0.07**	**0.05**	**0.07**					**0.05**		**0.05**	**0.05**	
INORGANIC	Molybdenum	µg/g	2	6.9		**1.9**				**2.7**	**0.71**		**0.5**	**0.5**	**1.1**					**0.5**		**0.5**	**0.5**	
INORGANIC	Nickel	µg/g	82	100		**9**				**10**	**2.1**		**5.9**	**4.4**	**6.5**					**5.4**		**3.1**	**2**	
INORGANIC	Phosphorus	µg/g	1500 [c.]																			**310**		
INORGANIC	Potassium	µg/g	4900 [c.]																			**200**		
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**				**6.6**	**5.8**		**0.5**	**0.5**	**0.85**					**0.5**		**0.5**	**0.5**	
INORGANIC	Silver	µg/g	0.5	20		**0.2**				**0.2**	**0.2**		**0.2**	**0.2**	**0.2**					**0.2**		**0.2**	**0.2**	
INORGANIC	Sodium	µg/g	180 [c.]																			**100**		
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.52**				**0.79**	**0.66**		**2.6**	**1.7**	**1.3**					**0.81**		**1.1**	**1.4**	
INORGANIC	Strontium	µg/g	77 [c.]																			**67**		
INORGANIC	Thallium	µg/g	1	1		**0.05**				**0.54**	**0.16**		**0.05**	**0.05**	**0.05**					**0.05**		**0.05**	**0.05**	
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**7.5**				**20**	**19**		**11**	**11**	**9.6**					**9.3**		**12**	**5.2**	
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**83**				**75**	**10**		**51**	**28**	**29**					**35**		**18**	**6.5**	
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH105	SLR BH105	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH107	SLR BH107	SLR BH107
					Sample ID	BH103 0-2'	BH103 10-12'	BH103 12-14'	BH103 14-16'	BH103 2-4'	BH103 4-6'	BH103 8-10'	BH105 0-4'	BH105 4-8'	BH106 0-4'	BH106 12-19'	BH106 19-24'	BH106 19-24'-102308	BH106 24-28'	BH106 4-8'	BH106 8-12'	BH107 0-4'	BH107 11-16'	BH107 11-16'-102308
					Start Depth	0	3.05	3.66	4.27	0.61	1.22	2.44	0	1.22	0	3.66	5.79	5.79	7.32	1.22	2.44	0	3.35	3.35
					End Depth	0.61	3.66	4.27	4.88	1.22	1.83	3.05	1.22	2.44	1.22	5.79	7.32	7.32	8.53	2.44	3.66	1.22	4.88	4.88
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**				**0.02**						**0.005**	**0.005**					**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**				**0.02**						**0.005**	**0.005**					**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.01**				**0.29**						**0.01**	**0.01**					**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.005**				**0.09**						**0.005**	**0.005**					**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67			**0.005**				**0.38**						**0.005**	**0.005**					**0.005**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.01**				**0.41**						**0.01**	**0.01**					**0.01**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.005**				**0.33**						**0.005**	**0.005**					**0.005**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**0.01**				**0.25**						**0.01**	**0.01**					**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**0.02**				**0.17**						**0.02**	**0.02**					**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.01**				**0.12**						**0.01**	**0.01**					**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.01**				**0.38**						**0.01**	**0.01**					**0.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**0.02**				**0.04**						**0.02**	**0.02**					**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.005**				**0.69**						**0.005**	**0.005**					**0.0076**
PAH	Fluorene	µg/g	0.19	62	62			**0.005**				**0.18**						**0.005**	**0.005**					**0.005**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**0.02**				**0.14**						**0.02**	**0.02**					**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200			**0.005**				**0.02**						**0.005**	**0.005**					**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270			**0.005**				**0.46**						**0.005**	**0.005**					**0.005**
PAH	Pyrene	µg/g	1	78	2600			**0.005**				**0.79**						**0.005**	**0.0052**					**0.0092**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35											**0.01**									
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55		**22**		**10**							**10**	**10**				**10**			
PHC	F1-BTEX	µg/g	25	55	55		**22**		**10**							**10**	**10**				**10**			
PHC	F2 (C10-C16)	µg/g	10	98	230		**330**		**10**							**10**	**10**				**10**			
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300			**1600**		**10**							**10**	**10**				**10**			
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800			**170**		**10**							**10**	**10**				**10**			
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None					Yes		Yes							Yes	Yes				Yes			
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			**0.002**																
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			**0.002**																
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			**0.002**																
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			**0.002**																
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			**0.002**																
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			**0.002**																
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			**0.002**																
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			**0.002**																
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			**0.002**																
VOC	1,2-Dichloroethene (Total)	µg/g																						

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Port Lands, Toronto, ON

					Location	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH103	SLR BH105	SLR BH105	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH106	SLR BH107	SLR BH107	SLR BH107
					Sample ID	BH103 0-2'	BH103 10-12'	BH103 12-14'	BH103 14-16'	BH103 2-4'	BH103 4-6'	BH103 8-10'	BH105 0-4'	BH105 4-8'	BH106 0-4'	BH106 12-19'	BH106 19-24'	BH106 19-24'-102308	BH106 24-28'	BH106 4-8'	BH106 8-12'	BH107 0-4'	BH107 11-16'	BH107 11-16'-102308
					Start Depth	0	3.05	3.66	4.27	0.61	1.22	2.44	0	1.22	0	3.66	5.79	5.79	7.32	1.22	2.44	0	3.35	3.35
					End Depth	0.61	3.66	4.27	4.88	1.22	1.83	3.05	1.22	2.44	1.22	5.79	7.32	7.32	8.53	2.44	3.66	1.22	4.88	4.88
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			**0.002**																
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			**0.002**																
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			**0.002**																
VOC	2-Butanone	µg/g	0.5	16	230			**0.11**																
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			**0.03**																
VOC	Acetone	µg/g	0.5	16	16			**0.5**																
VOC	Benzene	µg/g	0.02	0.21	14		**0.02**	**0.002**	**0.02**							**0.02**	**0.02**				**0.02**			
VOC	Bromodichloromethane	µg/g	0.05	13	50			**0.002**																
VOC	Bromoform	µg/g	0.05	0.27	21			**0.002**																
VOC	Bromomethane	µg/g	0.05	0.05	1.4			**0.003**																
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			**0.002**																
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			**0.002**																
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			**0.002**																
VOC	Chloroform	µg/g	0.05	0.05	9.5			**0.002**																
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			**0.002**																
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**																
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			**0.003**																
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.02**	**0.002**	**0.02**							**0.02**	**0.02**				**0.02**			
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			**0.002**																
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66			**0.002**																
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			**0.002**																
VOC	Toluene	µg/g	0.2	2.3	68		**0.02**	**0.002**	**0.02**							**0.02**	**0.02**				**0.02**			
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			**0.002**																
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**																
VOC	Trichloroethylene	µg/g	0.05	0.061	300			**0.002**																
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			**0.002**																
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.02**	**0.002**	**0.02**							**0.02**	**0.02**				**0.02**			
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**0.04**	**0.002**	**0.04**							**0.04**	**0.04**				**0.04**			
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.04**	**0.002**	**0.04**							**0.04**	**0.04**				**0.04**			

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH107	SLR BH107	SLR BH107	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH110	SLR BH110	SLR BH110
					Sample ID	BH107 16-20'	BH107 4-8'	BH107 8-11'	BH 108 0-2'	BH 108 10-12'	BH 108 12-14'	BH 108 16-18'	BH 108 4-6'	BH 108 6-8	BH109 0-4'	BH109 10-12'	BH109 10-12'-102308	BH109 12-16'	BH109 16-20'	BH109 4-8'	BH109 8-10'	BH 110 0-2'	BH 110 10-12'	BH 110 14-16'
					Start Depth	4.88	1.22	2.44	0	3.05	3.66	4.88	1.22	1.83	0	3.05	3.05	3.66	4.88	1.22	2.44	0	3.05	4.27
					End Depth	6.1	2.44	3.35	0.61	3.66	4.27	5.49	1.83	2.44	1.22	3.66	3.66	4.88	6.1	2.44	3.05	0.61	3.66	4.88
					Date	23 Oct 2008	23 Oct 2008	23 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**18**	**17**	**29**	**5.3**	**18**	**19**	**17**	**4.2**	**16**	**5.4**	**12**	**15**	**18**	**17**	**16**	**11**	**5.7**	**17**	**18**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]				**7.73**		**7.93**				**9.23**		**7.53**					**7.8**		**8.07**		
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5			**0.2**		**3.3**				**0.2**		**0.2**					**0.2**		**0.2**		
INORGANIC	Arsenic	µg/g	18	18			**1**		**6.6**				**2**		**42**					**1**		**2.3**		
INORGANIC	Barium	µg/g	220	390			**9.2**		**80**				**17**		**6.1**					**7.3**		**32**		
INORGANIC	Beryllium	µg/g	2.5	4			**0.2**		**0.2**				**0.2**		**0.32**					**0.2**		**0.2**		
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5			**0.13**		**0.63**				**0.23**		**0.27**					**0.07**		**0.31**		
INORGANIC	Cadmium	µg/g	1.2	1.2			**0.1**		**0.34**				**0.1**		**0.18**					**0.1**		**0.1**		
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160			**5**		**10**				**4.2**		**3.5**					**5.6**		**10**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8			**0.2**		**0.3**				**0.2**		**0.2**					**0.2**		**0.2**		
INORGANIC	Cobalt	µg/g	22	22			**1.8**		**4.4**				**1.7**		**3.6**					**5.4**		**3.9**		
INORGANIC	Copper	µg/g	92	140			**2.7**		**61**				**4.7**		**8.3**					**2**		**19**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		**0.01**		**0.01**				**0.01**		**0.01**					**0.01**		**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**0.2**		**0.94**				**0.37**		**2.3**					**0.34**		**0.48**		
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120			**2.9**		**260**				**19**		**2.9**					**2.5**		**8.7**		
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		**0.05**		**0.4**				**0.05**		**0.05**					**0.05**		**0.05**		
INORGANIC	Molybdenum	µg/g	2	6.9			**0.5**		**2**				**0.5**		**0.5**					**0.5**		**0.5**		
INORGANIC	Nickel	µg/g	82	100			**3**		**18**				**3**		**8.9**					**11**		**9.1**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4			**0.5**		**0.62**				**0.5**		**0.53**					**0.5**		**0.5**		
INORGANIC	Silver	µg/g	0.5	20			**0.2**		**0.56**				**0.2**		**0.2**					**0.2**		**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**0.95**		**0.98**				**1.1**		**0.3**					**1.2**		**0.96**		
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1			**0.05**		**0.05**				**0.05**		**0.05**					**0.05**		**0.05**		
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86			**11**		**21**				**11**		**8.9**					**17**		**20**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340			**10**		**150**				**17**		**27**					**17**		**35**		
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH107	SLR BH107	SLR BH107	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH110	SLR BH110	SLR BH110
					Sample ID	BH107 16-20'	BH107 4-8'	BH107 8-11'	BH 108 0-2'	BH 108 10-12'	BH 108 12-14'	BH 108 16-18'	BH 108 4-6'	BH 108 6-8	BH109 0-4'	BH109 10-12'	BH109 10-12'-102308	BH109 12-16'	BH109 16-20'	BH109 4-8'	BH109 8-10'	BH 110 0-2'	BH 110 10-12'	BH 110 14-16'
					Start Depth	4.88	1.22	2.44	0	3.05	3.66	4.88	1.22	1.83	0	3.05	3.05	3.66	4.88	1.22	2.44	0	3.05	4.27
					End Depth	6.1	2.44	3.35	0.61	3.66	4.27	5.49	1.83	2.44	1.22	3.66	3.66	4.88	6.1	2.44	3.05	0.61	3.66	4.88
					Date	23 Oct 2008	23 Oct 2008	23 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.005**					**0.005**			**0.0058**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.01**					**0.01**			**0.01**			**0.01**	**0.01**			**0.01**		**0.01**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.01**					**0.01**			**0.01**			**0.01**	**0.01**			**0.01**		**0.01**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.0052**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78		**0.01**					**0.01**			**0.01**			**0.01**	**0.01**			**0.01**		**0.01**	
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.02**					**0.02**			**0.02**			**0.02**	**0.02**			**0.02**		**0.02**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.01**					**0.01**			**0.01**			**0.01**	**0.01**			**0.01**		**0.01**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.01**					**0.01**			**0.01**			**0.01**	**0.01**			**0.01**		**0.01**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.02**					**0.02**			**0.02**			**0.02**	**0.02**			**0.02**		**0.02**	
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.01**					**0.0052**			**0.005**			**0.01**	**0.0071**			**0.0064**		**0.005**	
PAH	Fluorene	µg/g	0.19	62	62	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.02**					**0.02**			**0.02**			**0.02**	**0.02**			**0.02**		**0.02**	
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.005**					**0.005**			**0.005**			**0.005**	**0.005**			**0.005**		**0.005**	
PAH	Pyrene	µg/g	1	78	2600	**0.01**					**0.01**			**0.0062**			**0.02**	**0.01**			**0.01**		**0.01**	
PCB	Aroclor 1016	µg/g														**0.01**								
PCB	Aroclor 1221	µg/g														**0.01**								
PCB	Aroclor 1232	µg/g														**0.01**								
PCB	Aroclor 1242	µg/g														**0.01**								
PCB	Aroclor 1248	µg/g														**0.01**								
PCB	Aroclor 1254	µg/g														**0.01**								
PCB	Aroclor 1260	µg/g														**0.01**								
PCB	Aroclor 1262	µg/g														**0.01**								
PCB	Aroclor 1268	µg/g														**0.01**								
PCB	PCB, Total	µg/g	0.3	0.35												**0.01**					**0.01**			
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**		**10**		**10**							**10**					**10**
PHC	F1-BTEX	µg/g	25	55	55			**10**		**10**		**10**							**10**					**10**
PHC	F2 (C10-C16)	µg/g	10	98	230			**32**		**10**		**10**							**10**					**10**
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300				**190**		**10**		**10**							**10**					**10**
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800				**14**		**10**		**10**							**10**					**10**
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None						Yes		Yes		Yes							Yes					Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	**0.002**								**0.002**										
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	**0.002**								**0.002**										
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	**0.002**								**0.002**										
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	**0.002**								**0.002**										
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	**0.002**								**0.002**										
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	**0.002**								**0.002**										
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	**0.002**								**0.002**										
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	**0.002**								**0.002**										
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	**0.002**								**0.002**										
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH107	SLR BH107	SLR BH107	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH108	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH109	SLR BH110	SLR BH110	SLR BH110
					Sample ID	BH107 16-20'	BH107 4-8'	BH107 8-11'	BH 108 0-2'	BH 108 10-12'	BH 108 12-14'	BH 108 16-18'	BH 108 4-6'	BH 108 6-8	BH109 0-4'	BH109 10-12'	BH109 10-12'-102308	BH109 12-16'	BH109 16-20'	BH109 4-8'	BH109 8-10'	BH 110 0-2'	BH 110 10-12'	BH 110 14-16'
					Start Depth	4.88	1.22	2.44	0	3.05	3.66	4.88	1.22	1.83	0	3.05	3.05	3.66	4.88	1.22	2.44	0	3.05	4.27
					End Depth	6.1	2.44	3.35	0.61	3.66	4.27	5.49	1.83	2.44	1.22	3.66	3.66	4.88	6.1	2.44	3.05	0.61	3.66	4.88
					Date	23 Oct 2008	23 Oct 2008	23 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	23 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	**0.002**								**0.002**									
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	**0.002**								**0.002**									
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																			
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	**0.002**								**0.002**									
VOC	2-Butanone	µg/g	0.5	16	230	**0.03**								**0.03**									
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	**0.03**								**0.03**									
VOC	Acetone	µg/g	0.5	16	16	**0.1**								**0.1**									
VOC	Benzene	µg/g	0.02	0.21	14	**0.003**		**0.02**		**0.02**		**0.02**		**0.003**					**0.02**				**0.02**
VOC	Bromodichloromethane	µg/g	0.05	13	50	**0.002**								**0.002**									
VOC	Bromoform	µg/g	0.05	0.27	21	**0.002**								**0.002**									
VOC	Bromomethane	µg/g	0.05	0.05	1.4	**0.003**								**0.003**									
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	**0.002**								**0.002**									
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	**0.002**								**0.002**									
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	**0.002**								**0.002**									
VOC	Chloroform	µg/g	0.05	0.05	9.5	**0.002**								**0.002**									
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	**0.002**								**0.002**									
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**								**0.002**									
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																		
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	**0.003**								**0.003**									
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.002**		**0.02**		**0.02**		**0.02**		**0.003**					**0.02**				**0.02**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	**0.002**								**0.002**									
VOC	n-Hexane	µg/g	0.05	2.8	54																		
VOC	Styrene	µg/g	0.05	0.7	66	**0.002**								**0.002**									
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	**0.002**								**0.002**									
VOC	Toluene	µg/g	0.2	2.3	68	**0.01**		**0.02**		**0.02**		**0.02**		**0.01**					**0.02**				**0.02**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	**0.002**								**0.002**									
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**								**0.002**									
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.002**								**0.002**									
VOC	Trichlorofluoromethane	µg/g	0.25	4																			
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	**0.002**								**0.002**									
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.002**		**0.02**		**0.02**		**0.02**		**0.002**					**0.02**				**0.02**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.009**		**0.04**		**0.04**		**0.04**		**0.01**					**0.04**				**0.04**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.01**		**0.04**		**0.04**		**0.04**		**0.01**					**0.04**				**0.04**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH110	SLR BH110	SLR BH110	SLR BH110	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH113	SLR BH113	SLR BH113	SLR BH113
					Sample ID	BH 110 2-4'	BH 110 4-6'	BH 110 8-10'	DUP E-102408	BH 111 0-2'	BH 111 10-12'	BH 111 14-16'	BH 111 2-4'	BH 111 4-6'	BH 111 6-8'	BH 111 8-10'	BH 112 0-2'	BH 112 10-12'	BH 112 12-14'	BH 112 2-4'	BH 112 8-10	BH113 0-2'	BH113 10-12'	BH113 12-14'	BH113 2-4'
					Start Depth	0.61	1.22	2.44	2.44	0	3.05	4.27	0.61	1.22	1.83	2.44	0	3.05	3.66	0.61	2.44	0	3.05	3.66	0.61
					End Depth	1.22	1.83	3.05	3.05	0.61	3.66	4.88	1.22	1.83	2.44	3.05	0.61	3.66	4.27	1.22	3.05	0.61	3.66	4.27	1.22
					Date	24 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**3.4**	**16**	**17**	**16**	**13**	**15**	**29**	**11**	**25**	**25**	**11**	**4.3**	**14**	**19**	**14**	**22**	**19**	**28**	**12**	**12**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.61**				**7.81**			**7.64**				**7.89**			**7.38**		**7.55**			**8.4**
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**				**0.2**			**0.58**				**0.2**			**0.86**		**1.3**			**1.2**
INORGANIC	Arsenic	µg/g	18	18		**1**				**2.9**			**2.3**				**3.2**			**9.8**		**3.9**			**8**
INORGANIC	Barium	µg/g	220	390		**5.6**				**92**			**28**				**9.2**			**60**		**83**			**72**
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**				**0.57**			**0.2**				**0.2**			**0.63**		**0.6**			**0.32**
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.23**				**0.21**			**0.34**				**0.05**			**0.09**		**0.44**			**0.44**
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.26**				**0.1**			**0.39**				**0.56**			**0.58**		**0.21**			**0.45**
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**3.4**				**28**			**8.3**				**2.1**			**13**		**21**			**19**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**				**0.2**			**0.4**				**0.2**			**0.2**		**1**			**1**
INORGANIC	Cobalt	µg/g	22	22		**3.4**				**9**			**3.5**				**1.7**			**33**		**7.6**			**6.2**
INORGANIC	Copper	µg/g	92	140		**10**				**23**			**19**				**7.3**			**43**		**28**			**43**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**				**0.01**			**0.01**				**0.01**			**0.01**		**0.01**			**0.01**
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**1.4**				**0.27**			**0.22**				**0.25**			**1.9**		**0.31**			**0.41**
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**1.9**				**11**			**48**				**14**			**100**		**64**			**79**
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**				**0.06**			**0.05**				**0.05**			**0.07**		**0.15**			**0.15**
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**				**0.5**			**0.63**				**0.5**			**0.5**		**0.5**			**2.2**
INORGANIC	Nickel	µg/g	82	100		**5.3**				**23**			**6.2**				**2.8**			**47**		**19**			**15**
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**				**0.5**			**0.5**				**0.5**			**0.55**		**0.5**			**0.5**
INORGANIC	Silver	µg/g	0.5	20		**0.2**				**0.2**			**0.2**				**0.2**			**0.2**		**0.2**			**0.2**
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.4**				**0.85**			**0.64**				**0.89**			**1.1**		**0.28**			**0.88**
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		**0.05**				**0.11**			**0.05**				**0.05**			**0.08**		**0.14**			**0.13**
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86		**10**				**31**			**5.4**				**5**			**19**		**26**			**19**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340		**30**				**48**			**53**				**380**			**120**		**81**			**150**
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH110	SLR BH110	SLR BH110	SLR BH110	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH113	SLR BH113	SLR BH113	SLR BH113
					Sample ID	BH 110 2-4'	BH 110 4-6'	BH 110 8-10'	DUP E-102408	BH 111 0-2'	BH 111 10-12'	BH 111 14-16'	BH 111 2-4'	BH 111 4-6'	BH 111 6-8'	BH 111 8-10'	BH 112 0-2'	BH 112 10-12'	BH 112 12-14'	BH 112 2-4'	BH 112 8-10	BH113 0-2'	BH113 10-12'	BH113 12-14'	BH113 2-4'
					Start Depth	0.61	1.22	2.44	2.44	0	3.05	4.27	0.61	1.22	1.83	2.44	0	3.05	3.66	0.61	2.44	0	3.05	3.66	0.61
					End Depth	1.22	1.83	3.05	3.05	0.61	3.66	4.88	1.22	1.83	2.44	3.05	0.61	3.66	4.27	1.22	3.05	0.61	3.66	4.27	1.22
					Date	24 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76						**0.005**				**0.0053**				**0.3**				**0.005**		
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76						**0.005**				**0.0076**				**0.02**				**0.005**		
PAH	Acenaphthene	µg/g	0.072	7.9	560						**0.01**				**0.01**				**0.02**				**0.01**		
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15						**0.0052**				**0.05**				**0.005**				**0.005**		
PAH	Anthracene	µg/g	0.22	0.67	0.67						**0.0069**				**0.03**				**0.01**				**0.005**		
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11						**0.02**				**0.16**				**0.01**				**0.01**		
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13						**0.01**				**0.17**				**0.005**				**0.005**		
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78							**0.01**				**0.14**				**0.01**				**0.01**		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13						**0.02**				**0.1**				**0.02**				**0.02**		
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13						**0.01**				**0.05**				**0.01**				**0.01**		
PAH	Chrysene	µg/g	2.8	7	3.6E+11						**0.01**				**0.09**				**0.01**				**0.01**		
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13						**0.02**				**0.02**				**0.02**				**0.02**		
PAH	Fluoranthene	µg/g	0.69	0.69	40000						**0.02**				**0.22**				**0.0094**				**0.005**		
PAH	Fluorene	µg/g	0.19	62	62						**0.005**				**0.0074**				**0.04**				**0.005**		
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13						**0.02**				**0.09**				**0.02**				**0.02**		
PAH	Naphthalene	µg/g	0.09	0.6	200						**0.005**				**0.01**				**0.01**				**0.005**		
PAH	Phenanthrene	µg/g	0.69	6.2	270						**0.01**				**0.06**				**0.13**				**0.005**		
PAH	Pyrene	µg/g	1	78	2600						**0.05**				**0.34**				**0.01**				**0.005**		
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35			**0.01**							**0.01**											
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**				**10**				**10**		**910**					**10**		
PHC	F1-BTEX	µg/g	25	55	55			**10**				**10**				**10**		**900**					**10**		
PHC	F2 (C10-C16)	µg/g	10	98	230			**10**	**10**			**10**				**10**		**5100**					**36**		
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300				**10**	**10**			**10**				**10**		**900**					**450**		
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800				**10**	**10**			**10**				**10**		**10**					**53**		
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None						Yes	Yes			Yes				Yes		Yes					Yes		
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37																**0.1**				
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8																**0.1**				
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48																**0.1**				
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120																**0.1**				
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600																**0.1**				
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11																**0.1**				
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86																**0.1**				
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60																**0.1**				
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180																**0.1**				
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH110	SLR BH110	SLR BH110	SLR BH110	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH111	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH112	SLR BH113	SLR BH113	SLR BH113	SLR BH113
					Sample ID	BH 110 2-4'	BH 110 4-6'	BH 110 8-10'	DUP E-102408	BH 111 0-2'	BH 111 10-12'	BH 111 14-16'	BH 111 2-4'	BH 111 4-6'	BH 111 6-8'	BH 111 8-10'	BH 112 0-2'	BH 112 10-12'	BH 112 12-14'	BH 112 2-4'	BH 112 8-10	BH113 0-2'	BH113 10-12'	BH113 12-14'	BH113 2-4'
					Start Depth	0.61	1.22	2.44	2.44	0	3.05	4.27	0.61	1.22	1.83	2.44	0	3.05	3.66	0.61	2.44	0	3.05	3.66	0.61
					End Depth	1.22	1.83	3.05	3.05	0.61	3.66	4.88	1.22	1.83	2.44	3.05	0.61	3.66	4.27	1.22	3.05	0.61	3.66	4.27	1.22
					Date	24 Oct 2008	24 Oct 2008	24 Oct 2008	24 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	29 Oct 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76															**0.1**				
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59															**0.1**				
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59															**0.1**				
VOC	2-Butanone	µg/g	0.5	16	230															**1**				
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150															**1**				
VOC	Acetone	µg/g	0.5	16	16															**5**				
VOC	Benzene	µg/g	0.02	0.21	14			**0.02**				**0.02**				**0.02**		**0.2**		**0.1**		**0.02**		
VOC	Bromodichloromethane	µg/g	0.05	13	50															**0.1**				
VOC	Bromoform	µg/g	0.05	0.27	21															**0.1**				
VOC	Bromomethane	µg/g	0.05	0.05	1.4															**0.2**				
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3															**0.1**				
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4															**0.1**				
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48															**0.1**				
VOC	Chloroform	µg/g	0.05	0.05	9.5															**0.1**				
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130															**0.1**				
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05																**0.1**				
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4															**0.2**				
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.02**				**0.02**				**0.02**		**1.1**		**0.1**		**0.02**		
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220															**0.1**				
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66															**0.1**				
VOC	Tetrachloroethene	µg/g	0.05	0.28	18															**0.1**				
VOC	Toluene	µg/g	0.2	2.3	68			**0.02**				**0.02**				**0.02**		**0.2**		**0.1**		**0.06**		
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220															**0.1**				
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05																**0.1**				
VOC	Trichloroethylene	µg/g	0.05	0.061	300															**0.1**				
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270															**0.1**				
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.02**				**0.02**				**0.02**		**0.2**		**0.1**		**0.02**		
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.04**				**0.04**				**0.04**		**1**		**0.1**		**0.04**		
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.04**				**0.04**				**0.04**		**1**		**0.1**		**0.04**		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH113	SLR BH113	SLR BH113	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH116	SLR BH116	SLR BH116	SLR BH116
					Sample ID	BH113 4-6'	BH113 6-8'	BH113 8-10'	BH114 0-2'	BH114 10-12'	BH114 12-14'	BH114 14-16'	BH114 2-4'	BH114 4-6'	BH114 8-10'	BH115 0-2'	BH115 18-20'	BH115 2-4'	BH115 28-30'	BH115 4-6'	BH115 8-10'	BH 116 0-2'	BH 116 14-16'	BH 116 16-18'	BH 116 20-22'
					Start Depth	1.22	1.83	2.44	0	3.05	3.66	4.27	0.61	1.22	2.44	0	5.49	0.61	8.53	1.22	2.44	0	4.27	4.88	6.1
					End Depth	1.83	2.44	3.05	0.61	3.66	4.27	4.88	1.22	1.83	3.05	0.61	6.1	1.22	9.14	1.83	3.05	0.61	4.88	5.49	6.71
					Date	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**14**	**16**	**17**	**13**	**34**	**24**	**30**	**2.2**	**25**	**36**	**4.1**	**20**	**11**	**20**	**20**	**21**	**9.7**	**17**	**24**	**18**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.79**			**9.1**							**7.71**		**7.8**		**8.7**		**7.46**			
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**			**0.81**				**0.42**			**0.59**		**1.7**		**4.2**		**0.3**			
INORGANIC	Arsenic	µg/g	18	18		**2.8**			**3.2**				**2.8**			**13**		**4.9**		**5.7**		**3.4**			
INORGANIC	Barium	µg/g	220	390		**92**			**56**				**29**			**34**		**73**		**280**		**41**			
INORGANIC	Beryllium	µg/g	2.5	4		**0.55**			**0.35**				**0.2**			**0.2**		**0.49**		**0.42**		**0.21**			
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.4**			**0.36**				**0.15**			**0.39**		**0.76**		**1.3**		**0.18**			
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**			**0.29**				**0.15**			**0.29**		**0.14**		**0.27**		**0.1**			
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**20**			**39**				**27**			**12**		**15**		**39**		**6.4**			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**			**6**				**0.2**			**0.2**		**0.2**		**0.2**		**0.4**			
INORGANIC	Cobalt	µg/g	22	22		**9.5**			**3.8**				**5.5**			**6**		**8.8**		**5.2**		**3.4**			
INORGANIC	Copper	µg/g	92	140		**22**			**45**				**35**			**29**		**37**		**47**		**17**			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**			**0.01**				**0.01**			**0.01**		**0.01**		**0.01**		**0.01**			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.39**			**0.74**							**0.41**		**0.44**		**1.1**		**0.2**			
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**11**			**150**				**42**			**55**		**65**		**230**		**60**			
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**			**0.05**				**0.05**			**0.05**		**0.11**		**0.35**		**0.16**			
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**			**1.2**				**2.5**			**1.6**		**0.5**		**0.66**		**0.5**			
INORGANIC	Nickel	µg/g	82	100		**21**			**9.4**				**7.9**			**20**		**19**		**11**		**6.7**			
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**			**0.5**				**0.5**			**0.84**		**0.56**		**1**		**0.66**			
INORGANIC	Silver	µg/g	0.5	20		**0.2**			**0.2**				**0.2**			**0.27**		**0.74**		**0.26**		**0.2**			
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.24**			**4.3**				**1.6**			**0.48**		**1.5**		**1.6**		**0.19**			
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		**0.08**			**0.05**				**0.05**			**0.05**		**0.06**		**0.11**		**0.05**			
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86		**25**			**20**				**16**			**19**		**22**		**27**		**11**			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340		**48**			**130**				**54**			**72**		**71**		**150**		**43**			
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH113	SLR BH113	SLR BH113	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH116	SLR BH116	SLR BH116	SLR BH116
					Sample ID	BH113 4-6'	BH113 6-8'	BH113 8-10'	BH114 0-2'	BH114 10-12'	BH114 12-14'	BH114 14-16'	BH114 2-4'	BH114 4-6'	BH114 8-10'	BH115 0-2'	BH115 18-20'	BH115 2-4'	BH115 28-30'	BH115 4-6'	BH115 8-10'	BH 116 0-2'	BH 116 14-16'	BH 116 16-18'	BH 116 20-22'
					Start Depth	1.22	1.83	2.44	0	3.05	3.66	4.27	0.61	1.22	2.44	0	5.49	0.61	8.53	1.22	2.44	0	4.27	4.88	6.1
					End Depth	1.83	2.44	3.05	0.61	3.66	4.27	4.88	1.22	1.83	3.05	0.61	6.1	1.22	9.14	1.83	3.05	0.61	4.88	5.49	6.71
					Date	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**		**0.1**		**0.03**					**0.005**		**0.05**				**0.005**		**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**		**0.07**		**0.03**					**0.005**		**0.005**				**0.005**		**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.01**		**0.15**		**0.25**					**0.02**		**0.06**				**0.01**		**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.005**		**0.04**		**0.07**					**0.005**		**0.0055**				**0.005**		**0.02**
PAH	Anthracene	µg/g	0.22	0.67	0.67			**0.006**		**0.15**		**0.24**					**0.01**		**0.05**				**0.005**		**0.01**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.02**		**0.28**		**0.29**					**0.02**		**0.03**				**0.01**		**0.03**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.01**		**0.17**		**0.18**					**0.01**		**0.01**				**0.0063**		**0.02**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**0.01**		**0.19**		**0.17**					**0.01**		**0.01**				**0.01**		**0.02**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**0.02**		**0.09**		**0.07**					**0.02**		**0.02**				**0.02**		**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.01**		**0.06**		**0.06**					**0.01**		**0.01**				**0.01**		**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.01**		**0.26**		**0.25**					**0.01**		**0.03**				**0.01**		**0.04**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**0.02**		**0.04**		**0.04**					**0.02**		**0.02**				**0.02**		**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.05**		**0.45**		**0.47**					**0.03**		**0.07**				**0.01**		**0.04**
PAH	Fluorene	µg/g	0.19	62	62			**0.005**		**0.11**		**0.2**					**0.01**		**0.03**				**0.005**		**0.0057**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**0.02**		**0.09**		**0.07**					**0.02**		**0.02**				**0.02**		**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200			**0.005**		**0.08**		**0.04**					**0.005**		**0.0054**				**0.005**		**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270			**0.0092**		**0.54**		**0.71**					**0.05**		**0.18**				**0.005**		**0.0079**
PAH	Pyrene	µg/g	1	78	2600			**0.07**		**0.5**		**0.59**					**0.03**		**0.09**				**0.02**		**0.06**
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35										**0.01**						**0.01**					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55		**10**				**10**				**10**		**10**				**10**			**10**	
PHC	F1-BTEX	µg/g	25	55	55		**10**				**10**				**10**		**10**				**10**			**10**	
PHC	F2 (C10-C16)	µg/g	10	98	230		**10**				**41**				**36**		**10**				**12**			**10**	
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300			**16**				**140**				**170**		**10**				**130**			**140**	
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800			**10**				**10**				**14**		**10**				**23**			**350**	
PHC	F4G-SG	µg/g	120	2800																				**1500**	
PHC	**Chrom. to baseline at nC5No**	None					Yes				Yes				Yes		Yes				Yes			**No**	
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			**0.002**		**0.1**															
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			**0.002**		**0.1**															
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			**0.002**		**0.1**															
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			**0.002**		**0.1**															
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			**0.002**		**0.1**															
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			**0.002**		**0.1**															
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			**0.002**		**0.1**															
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			**0.002**		**0.1**															
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			**0.002**		**0.1**															
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH113	SLR BH113	SLR BH113	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH114	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH115	SLR BH116	SLR BH116	SLR BH116	SLR BH116
						Sample ID	BH113 4-6'	BH113 6-8'	BH113 8-10'	BH114 0-2'	BH114 10-12'	BH114 12-14'	BH114 14-16'	BH114 2-4'	BH114 4-6'	BH114 8-10'	BH115 0-2'	BH115 18-20'	BH115 2-4'	BH115 28-30'	BH115 4-6'	BH115 8-10'	BH 116 0-2'	BH 116 14-16'	BH 116 16-18'	BH 116 20-22'
						Start Depth	1.22	1.83	2.44	0	3.05	3.66	4.27	0.61	1.22	2.44	0	5.49	0.61	8.53	1.22	2.44	0	4.27	4.88	6.1
						End Depth	1.83	2.44	3.05	0.61	3.66	4.27	4.88	1.22	1.83	3.05	0.61	6.1	1.22	9.14	1.83	3.05	0.61	4.88	5.49	6.71
						Date	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Dec 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008	16 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			**0.002**		**0.1**																
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			**0.002**		**0.1**																
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																						
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			**0.002**		**0.1**																
VOC	2-Butanone	µg/g	0.5	16	230			**0.03**		**1**																
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			**0.03**		**1**																
VOC	Acetone	µg/g	0.5	16	16			**0.1**		**5**																
VOC	Benzene	µg/g	0.02	0.21	14		**0.02**	**0.004**		**0.1**	**0.02**					**0.02**		**0.02**				**0.05**			**0.02**	
VOC	Bromodichloromethane	µg/g	0.05	13	50			**0.002**		**0.1**																
VOC	Bromoform	µg/g	0.05	0.27	21			**0.002**		**0.1**																
VOC	Bromomethane	µg/g	0.05	0.05	1.4			**0.003**		**0.2**																
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			**0.002**		**0.1**																
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			**0.002**		**0.1**																
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			**0.002**		**0.1**																
VOC	Chloroform	µg/g	0.05	0.05	9.5			**0.002**		**0.1**																
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			**0.002**		**0.1**																
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**		**0.1**																
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																					
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			**0.003**		**0.2**																
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.02**	**0.002**		**0.1**	**0.02**					**0.02**		**0.02**				**0.02**			**0.02**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			**0.002**		**0.1**																
VOC	n-Hexane	µg/g	0.05	2.8	54																					
VOC	Styrene	µg/g	0.05	0.7	66			**0.002**		**0.1**																
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			**0.002**		**0.1**																
VOC	Toluene	µg/g	0.2	2.3	68		**0.02**	**0.01**		**0.1**	**0.02**					**0.02**		**0.02**				**0.02**			**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			**0.002**		**0.1**																
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**		**0.1**																
VOC	Trichloroethylene	µg/g	0.05	0.061	300			**0.002**		**0.1**																
VOC	Trichlorofluoromethane	µg/g	0.25	4																						
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			**0.002**		**0.1**																
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.02**	**0.002**		**0.1**	**0.02**					**0.02**		**0.02**				**0.02**			**0.02**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**0.04**	**0.008**		**0.1**	**0.04**					**0.04**		**0.04**				**0.04**			**0.04**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.04**	**0.01**		**0.1**	**0.04**					**0.04**		**0.04**				**0.04**			**0.04**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH116	SLR BH116	SLR BH116	SLR BH116	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH119	SLR BH119	SLR BH119
					Sample ID	BH 116 2-4'	BH 116 4-6'	BH 116 8-10'	DUP F	BH117 12-14'	BH117 14-16'	BH117 16-18'	BH117 18-20'	BH117 2-4	BH117 4-6'	BH 118 12-14'	BH 118 14-16'	BH 118 16-18'	BH 118 18-20'	BH 118 2-4'	BH 118 4-6'	BH 119 10-12'	BH 119 12-14'	BH 119 14-16'
					Start Depth	0.61	1.22	2.44	4.88	3.66	4.27	4.88	5.49	0.61	1.22	3.66	4.27	4.88	5.49	0.61	1.22	3.05	3.66	4.27
					End Depth	1.22	1.83	3.05	5.49	4.27	4.88	5.49	6.1	1.22	1.83	4.27	4.88	5.49	6.1	1.22	1.83	3.66	4.27	4.88
					Date	16 Oct 2008	16 Oct 2008	16 Oct 2008	29 Oct 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**26**	**2.7**	**17**	**17**	**26**	**22**	**32**	**26**	**15**	**21**	**30**	**27**	**26**	**25**	**18**	**20**	**18**	**17**	**18**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.49**	**8.21**							**8.72**	**7.63**					**7.5**	**7.61**			
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**	**0.2**							**0.2**	**0.2**					**0.2**	**0.2**			
INORGANIC	Arsenic	µg/g	18	18		**3.6**	**1**							**1.1**	**1.3**					**1.3**	**1.1**			
INORGANIC	Barium	µg/g	220	390		**85**	**6.8**							**12**	**43**					**19**	**26**			
INORGANIC	Beryllium	µg/g	2.5	4		**0.57**	**0.2**							**0.2**	**0.32**					**0.2**	**0.24**			
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.67**	**0.03**							**0.01**	**0.43**					**0.64**	**0.35**			
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.14**	**0.1**							**0.1**	**0.1**					**0.1**	**0.1**			
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**29**	**3.5**							**6.3**	**13**					**7.1**	**10**			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**0.2**							**0.2**	**0.2**					**0.2**	**0.2**			
INORGANIC	Cobalt	µg/g	22	22		**10**	**1.4**							**7.3**	**6.7**					**4.2**	**5.7**			
INORGANIC	Copper	µg/g	92	140		**26**	**2.5**							**7.4**	**15**					**7.6**	**11**			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.01**							**0.01**	**0.01**					**0.01**	**0.01**			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.27**	**0.1**							**0.35**	**0.79**					**0.54**	**0.67**			
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**18**	**5.2**							**7.8**	**10**					**7.5**	**6.7**			
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.11**	**0.05**							**0.05**	**0.06**					**0.05**	**0.05**			
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**	**0.5**							**0.5**	**0.5**					**0.5**	**0.5**			
INORGANIC	Nickel	µg/g	82	100		**23**	**2.4**							**5.6**	**12**					**6.8**	**10**			
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.5**							**0.5**	**0.5**					**0.5**	**0.5**			
INORGANIC	Silver	µg/g	0.5	20		**0.2**	**0.2**							**0.2**	**0.2**					**0.2**	**0.2**			
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.17**	**0.27**							**15**	**30**					**20**	**21**			
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.12**	**0.05**							**0.05**	**0.09**					**0.07**	**0.06**			
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**33**	**8.5**							**11**	**15**					**11**	**14**			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**61**	**8.5**							**21**	**38**					**25**	**29**			
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH116	SLR BH116	SLR BH116	SLR BH116	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH119	SLR BH119	SLR BH119
					Sample ID	BH 116 2-4'	BH 116 4-6'	BH 116 8-10'	DUP F	BH117 12-14'	BH117 14-16'	BH117 16-18'	BH117 18-20'	BH117 2-4	BH117 4-6'	BH 118 12-14'	BH 118 14-16'	BH 118 16-18'	BH 118 18-20'	BH 118 2-4'	BH 118 4-6'	BH 119 10-12'	BH 119 12-14'	BH 119 14-16'
					Start Depth	0.61	1.22	2.44	4.88	3.66	4.27	4.88	5.49	0.61	1.22	3.66	4.27	4.88	5.49	0.61	1.22	3.05	3.66	4.27
					End Depth	1.22	1.83	3.05	5.49	4.27	4.88	5.49	6.1	1.22	1.83	4.27	4.88	5.49	6.1	1.22	1.83	3.66	4.27	4.88
					Date	16 Oct 2008	16 Oct 2008	16 Oct 2008	29 Oct 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76							**0.005**	**0.005**				**0.005**		**0.01**					**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76							**0.005**	**0.005**				**0.005**		**0.01**					**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560							**0.01**	**0.01**				**0.01**		**0.09**					**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15							**0.01**	**0.02**				**0.01**		**0.04**					**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67							**0.0092**	**0.03**				**0.0082**		**0.09**					**0.01**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11							**0.02**	**0.08**				**0.03**		**0.17**					**0.03**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13							**0.02**	**0.07**				**0.03**		**0.1**					**0.01**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78								**0.02**	**0.07**				**0.03**		**0.09**					**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13							**0.02**	**0.04**				**0.02**		**0.05**					**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13							**0.01**	**0.02**				**0.01**		**0.03**					**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11							**0.01**	**0.06**				**0.02**		**0.14**					**0.02**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13							**0.02**	**0.02**				**0.02**		**0.04**					**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000							**0.02**	**0.13**				**0.03**		**0.27**					**0.04**
PAH	Fluorene	µg/g	0.19	62	62							**0.005**	**0.0082**				**0.005**		**0.06**					**0.0078**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13							**0.02**	**0.04**				**0.02**		**0.04**					**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200							**0.0051**	**0.005**				**0.005**		**0.01**					**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270							**0.01**	**0.06**				**0.01**		**0.26**					**0.05**
PAH	Pyrene	µg/g	1	78	2600							**0.03**	**0.14**				**0.04**		**0.36**					**0.08**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																**0.01**				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**		**10**	**10**					**10**		**10**				**10**	**10**	
PHC	F1-BTEX	µg/g	25	55	55			**10**		**10**	**10**					**10**		**10**				**10**	**10**	
PHC	F2 (C10-C16)	µg/g	10	98	230			**10**	**10**	**10**	**10**					**10**		**10**				**10**	**10**	
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300				**10**	**190**	**10**	**10**					**10**		**10**				**10**	**10**	
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800				**10**	**330**	**10**	**10**					**10**		**10**				**10**	**10**	
PHC	F4G-SG	µg/g	120	2800					**1400**															
PHC	**Chrom. to baseline at nC5No**	None						Yes	**No**	Yes	Yes					Yes		Yes				Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37																			
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8																			
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48																			
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120																			
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600																			
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11																			
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86																			
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60																			
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180																			
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH116	SLR BH116	SLR BH116	SLR BH116	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH117	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH118	SLR BH119	SLR BH119	SLR BH119
					Sample ID	BH 116 2-4'	BH 116 4-6'	BH 116 8-10'	DUP F	BH117 12-14'	BH117 14-16'	BH117 16-18'	BH117 18-20'	BH117 2-4	BH117 4-6'	BH 118 12-14'	BH 118 14-16'	BH 118 16-18'	BH 118 18-20'	BH 118 2-4'	BH 118 4-6'	BH 119 10-12'	BH 119 12-14'	BH 119 14-16'
					Start Depth	0.61	1.22	2.44	4.88	3.66	4.27	4.88	5.49	0.61	1.22	3.66	4.27	4.88	5.49	0.61	1.22	3.05	3.66	4.27
					End Depth	1.22	1.83	3.05	5.49	4.27	4.88	5.49	6.1	1.22	1.83	4.27	4.88	5.49	6.1	1.22	1.83	3.66	4.27	4.88
					Date	16 Oct 2008	16 Oct 2008	16 Oct 2008	29 Oct 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008	11 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76																			
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59																			
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59																			
VOC	2-Butanone	µg/g	0.5	16	230																			
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150																			
VOC	Acetone	µg/g	0.5	16	16																			
VOC	Benzene	µg/g	0.02	0.21	14			**0.02**		**0.02**	**0.02**					**0.02**		**0.02**				**0.02**	**0.02**	
VOC	Bromodichloromethane	µg/g	0.05	13	50																			
VOC	Bromoform	µg/g	0.05	0.27	21																			
VOC	Bromomethane	µg/g	0.05	0.05	1.4																			
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3																			
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4																			
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48																			
VOC	Chloroform	µg/g	0.05	0.05	9.5																			
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130																			
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4																			
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.02**		**0.02**	**0.02**					**0.02**		**0.02**				**0.02**	**0.02**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220																			
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66																			
VOC	Tetrachloroethene	µg/g	0.05	0.28	18																			
VOC	Toluene	µg/g	0.2	2.3	68			**0.02**		**0.02**	**0.02**					**0.02**		**0.02**				**0.02**	**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220																			
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	Trichloroethylene	µg/g	0.05	0.061	300																			
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270																			
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.02**		**0.02**	**0.02**					**0.02**		**0.02**				**0.02**	**0.02**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.04**		**0.04**	**0.04**					**0.04**		**0.04**				**0.04**	**0.04**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.04**		**0.04**	**0.04**					**0.04**		**0.04**				**0.04**	**0.04**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH119	SLR BH119	SLR BH119	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122
					Sample ID	BH 119 16-18'	BH 119 2-4'	BH 119 4-6'	BH120 12-14	BH120 14-16	BH120 18-20	BH120 20-22	BH120 2-4	BH120 4-6	BH121 0-2'	BH121 4-6'	BH121 6-8'	BH121 8-10'	DUP I	BH 122 10-12'	BH 122 16-18'	BH 122 2-4'	BH 122 4-6'	DUP J	DUP K
					Start Depth	4.88	0.61	1.22	3.66	4.27	5.49	6.1	0.61	1.22	0	1.22	1.83	2.44	1.83	3.05	4.88	0.61	1.22	4.88	3.05
					End Depth	5.49	1.22	1.83	4.27	4.88	6.1	6.71	1.22	1.83	0.61	1.83	2.44	3.05	2.44	3.66	5.49	1.22	1.83	5.49	3.66
					Date	11 Nov 2008	11 Nov 2008	11 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**16**	**29**	**20**	**19**	**18**	**20**	**39**	**8.6**	**7.3**	**11**	**12**	**9.9**	**11**	**12**	**20**	**18**	**7.6**	**7.3**	**14**	**16**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]				**7.5**	**7.87**					**7.72**	**8.28**	**10.6**	**7.72**						**10.2**	**7.78**		
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5			**0.2**	**0.2**					**0.2**	**0.2**	**0.54**	**0.2**						**0.36**	**0.32**		
INORGANIC	Arsenic	µg/g	18	18			**1.9**	**1**					**1**	**1**	**3.9**	**1**						**2.9**	**1.4**		
INORGANIC	Barium	µg/g	220	390			**40**	**8.3**					**9.1**	**6.5**	**70**	**14**						**45**	**15**		
INORGANIC	Beryllium	µg/g	2.5	4			**0.29**	**0.2**					**0.2**	**0.2**	**0.36**	**0.2**						**0.2**	**0.2**		
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5			**0.79**	**0.38**					**0.2**	**0.03**	**0.33**	**0.08**						**0.08**	**0.05**		
INORGANIC	Cadmium	µg/g	1.2	1.2			**0.1**	**0.1**					**0.1**	**0.1**	**0.1**	**0.1**						**0.43**	**0.23**		
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160			**12**	**3.8**					**3.3**	**4**	**23**	**3.6**						**17**	**5.3**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8			**1**	**0.2**					**0.2**	**0.2**	**0.2**	**0.2**						**0.2**	**0.2**		
INORGANIC	Cobalt	µg/g	22	22			**8.1**	**1.8**					**1.8**	**1.6**	**9.8**	**1.9**						**3.1**	**1.9**		
INORGANIC	Copper	µg/g	92	140			**13**	**2.4**					**3**	**2.2**	**49**	**5.2**						**17**	**5.7**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		**0.01**	**0.01**					**0.01**	**0.01**	**0.01**	**0.01**						**0.01**	**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**1.5**	**0.88**					**0.68**	**0.3**	**0.64**	**0.97**						**0.99**	**0.16**		
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120			**9.1**	**2.8**					**4.9**	**3**	**53**	**3.9**						**37**	**56**		
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		**0.07**	**0.05**					**0.05**	**0.05**	**0.15**	**0.05**						**0.05**	**0.05**		
INORGANIC	Molybdenum	µg/g	2	6.9			**0.5**	**0.5**					**0.5**	**0.5**	**0.77**	**0.5**						**1.3**	**0.5**		
INORGANIC	Nickel	µg/g	82	100			**11**	**2.7**					**2.9**	**2.5**	**19**	**3.8**						**5.7**	**3**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4			**0.5**	**0.5**					**0.5**	**0.5**	**0.5**	**0.5**						**0.5**	**0.5**		
INORGANIC	Silver	µg/g	0.5	20			**0.2**	**0.2**					**0.2**	**0.2**	**0.2**	**0.2**						**0.2**	**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**49**	**23**					**22**	**6.8**	**53**	**16**						**4.6**	**0.9**		
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1			**0.1**	**0.05**					**0.05**	**0.05**	**0.08**	**0.05**						**0.05**	**0.05**		
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86			**17**	**7.9**					**5.9**	**8.3**	**29**	**6.2**						**14**	**14**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340			**33**	**9**					**10**	**10**	**69**	**15**						**120**	**30**		
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH119	SLR BH119	SLR BH119	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122
					Sample ID	BH 119 16-18'	BH 119 2-4'	BH 119 4-6'	BH120 12-14	BH120 14-16	BH120 18-20	BH120 20-22	BH120 2-4	BH120 4-6	BH121 0-2'	BH121 4-6'	BH121 6-8'	BH121 8-10'	DUP I	BH 122 10-12'	BH 122 16-18'	BH 122 2-4'	BH 122 4-6'	DUP J	DUP K
					Start Depth	4.88	0.61	1.22	3.66	4.27	5.49	6.1	0.61	1.22	0	1.22	1.83	2.44	1.83	3.05	4.88	0.61	1.22	4.88	3.05
					End Depth	5.49	1.22	1.83	4.27	4.88	6.1	6.71	1.22	1.83	0.61	1.83	2.44	3.05	2.44	3.66	5.49	1.22	1.83	5.49	3.66
					Date	11 Nov 2008	11 Nov 2008	11 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.005**					**0.005**	**0.005**													
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.005**					**0.005**	**0.005**													
PAH	Acenaphthene	µg/g	0.072	7.9	560	**0.03**					**0.01**	**0.01**													
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**0.01**					**0.005**	**0.005**													
PAH	Anthracene	µg/g	0.22	0.67	0.67	**0.01**					**0.005**	**0.005**													
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.04**					**0.01**	**0.01**													
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.01**					**0.005**	**0.005**													
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78		**0.01**					**0.01**	**0.01**													
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.02**					**0.02**	**0.02**													
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	**0.01**					**0.01**	**0.01**													
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.03**					**0.01**	**0.01**													
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	**0.02**					**0.02**	**0.02**													
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.05**					**0.0067**	**0.005**													
PAH	Fluorene	µg/g	0.19	62	62	**0.01**					**0.005**	**0.005**													
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**0.02**					**0.02**	**0.02**													
PAH	Naphthalene	µg/g	0.09	0.6	200	**0.005**					**0.005**	**0.005**													
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.02**					**0.005**	**0.005**													
PAH	Pyrene	µg/g	1	78	2600	**0.08**					**0.01**	**0.005**													
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35				**0.01**																	
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55				**10**	**10**															
PHC	F1-BTEX	µg/g	25	55	55				**10**	**10**															
PHC	F2 (C10-C16)	µg/g	10	98	230				**10**	**10**															
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300					**10**	**10**															
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800					**10**	**10**															
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None							Yes	Yes															
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH119	SLR BH119	SLR BH119	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH120	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH121	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122	SLR BH122
					Sample ID	BH 119 16-18'	BH 119 2-4'	BH 119 4-6'	BH120 12-14	BH120 14-16	BH120 18-20	BH120 20-22	BH120 2-4	BH120 4-6	BH121 0-2'	BH121 4-6'	BH121 6-8'	BH121 8-10'	DUP I	BH 122 10-12'	BH 122 16-18'	BH 122 2-4'	BH 122 4-6'	DUP J	DUP K
					Start Depth	4.88	0.61	1.22	3.66	4.27	5.49	6.1	0.61	1.22	0	1.22	1.83	2.44	1.83	3.05	4.88	0.61	1.22	4.88	3.05
					End Depth	5.49	1.22	1.83	4.27	4.88	6.1	6.71	1.22	1.83	0.61	1.83	2.44	3.05	2.44	3.66	5.49	1.22	1.83	5.49	3.66
					Date	11 Nov 2008	11 Nov 2008	11 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008	28 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	2-Butanone	µg/g	0.5	16	230											**30**	**6**	**1**	**0.03**	**0.03**			**0.03**	**0.03**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150											**30**	**6**	**1**	**0.03**	**0.03**			**0.03**	**0.03**
VOC	Acetone	µg/g	0.5	16	16											**100**	**30**	**5**	**0.1**	**0.1**			**0.1**	**0.1**
VOC	Benzene	µg/g	0.02	0.21	14				**0.02**	**0.02**						**2**	**0.5**	**0.1**	**0.004**	**0.006**			**0.005**	**0.003**
VOC	Bromodichloromethane	µg/g	0.05	13	50											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Bromoform	µg/g	0.05	0.27	21											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Bromomethane	µg/g	0.05	0.05	1.4											**3**	**0.8**	**0.2**	**0.003**	**0.003**			**0.003**	**0.003**
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Chloroform	µg/g	0.05	0.05	9.5											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4											**3**	**0.8**	**0.2**	**0.003**	**0.02**			**0.02**	**0.02**
VOC	Ethylbenzene	µg/g	0.05	2	17				**0.02**	**0.02**						**2**	**0.5**	**0.1**	**0.008**	**0.01**			**0.006**	**0.006**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Toluene	µg/g	0.2	2.3	68				**0.02**	**0.02**						**2**	**0.5**	**0.1**	**0.01**	**0.02**			**0.01**	**0.01**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05												**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Trichloroethylene	µg/g	0.05	0.061	300											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270											**2**	**0.5**	**0.1**	**0.002**	**0.002**			**0.002**	**0.002**
VOC	Xylene, o	µg/g	0.05	3.1	26				**0.02**	**0.02**						**2**	**0.5**	**0.1**	**0.004**	**0.006**			**0.003**	**0.004**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26				**0.04**	**0.04**						**2**	**0.5**	**0.1**	**0.01**	**0.02**			**0.01**	**0.01**
VOC	Xylenes, Total	µg/g	0.05	3.1	26				**0.04**	**0.04**						**2**	**0.5**	**0.1**	**0.02**	**0.03**			**0.01**	**0.01**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH126	SLR BH126	SLR BH126	SLR BH126	SLR BH126
					Sample ID	BH123 14-16'	BH123 2-4'	BH123 4-6'	BH123 6-8'	DUP L	BH 124 18-20'	BH 124 2-4'	BH 124 4-6'	BH 124 6-8'	DUP H	BH125 10-12	BH125 12-14	BH125 2-4	BH125 4-6	DUP H-111308	BH 126 10-12'	BH 126 16-18'	BH 126 18-20'	BH 126 20-22'	BH 126 4-6'
					Start Depth	4.27	0.61	1.22	1.83	1.83	5.49	0.61	1.22	1.83	5.49	3.05	3.66	0.61	1.22	3.05	3.05	4.88	5.49	6.1	1.22
					End Depth	4.88	1.22	1.83	2.44	2.44	6.1	1.22	1.83	2.44	6.1	3.66	4.27	1.22	1.83	3.66	3.66	5.49	6.1	6.71	1.83
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**29**	**3.7**	**7.7**	**15**	**9.1**	**19**	**21**	**32**	**21**	**19**	**31**	**26**	**6.6**	**20**	**31**	**53**	**26**	**31**	**20**	**23**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]				**9.59**	**8**				**9.01**	**7.13**					**10.6**	**7.84**					**7.47**
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5			**0.2**	**0.2**				**2.4**	**2.6**					**0.27**	**0.2**					**3.8**
INORGANIC	Arsenic	µg/g	18	18			**1**	**1**				**12**	**19**					**1.9**	**1.7**					**7.3**
INORGANIC	Barium	µg/g	220	390			**7.6**	**6.6**				**260**	**170**					**100**	**56**					**84**
INORGANIC	Beryllium	µg/g	2.5	4			**0.2**	**0.2**				**0.4**	**0.89**					**0.2**	**0.28**					**0.35**
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5			**0.08**	**0.07**				**2.1**	**1.7**					**0.27**	**0.4**					**0.58**
INORGANIC	Cadmium	µg/g	1.2	1.2			**0.1**	**0.1**				**0.35**	**0.27**					**0.1**	**0.1**					**0.48**
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160			**3.4**	**3.6**				**28**	**20**					**10**	**12**					**8.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8			**0.2**	**0.2**				**0.2**	**0.2**					**0.2**	**0.2**					**0.2**
INORGANIC	Cobalt	µg/g	22	22			**1.5**	**1.4**				**28**	**10**					**2.6**	**5.5**					**5.2**
INORGANIC	Copper	µg/g	92	140			**2.2**	**2.4**				**84**	**170**					**5.8**	**15**					**420**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		**0.01**	**0.01**				**0.03**	**0.01**					**0.01**	**0.01**					**0.01**
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**0.61**	**0.45**				**1.3**	**1.2**					**2.1**	**2.3**					**1.4**
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120			**2.6**	**2.5**				**500**	**280**					**1900**	**28**					**290**
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		**0.05**	**0.05**				**7.1**	**7.3**					**0.05**	**0.09**					**0.93**
INORGANIC	Molybdenum	µg/g	2	6.9			**0.5**	**0.5**				**1.6**	**7.7**					**0.5**	**0.5**					**1.8**
INORGANIC	Nickel	µg/g	82	100			**2.4**	**2.3**				**14**	**22**					**3.7**	**12**					**43**
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4			**0.5**	**0.5**				**1.7**	**8.6**					**0.5**	**0.5**					**1.8**
INORGANIC	Silver	µg/g	0.5	20			**0.2**	**0.2**				**1.1**	**1.8**					**0.2**	**0.2**					**0.36**
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**14**	**9.6**				**20**	**14**					**18**	**42**					**11**
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1			**0.05**	**0.05**				**0.14**	**0.19**					**0.05**	**0.1**					**0.08**
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86			**8.1**	**9.3**				**20**	**50**					**14**	**17**					**16**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340			**7.7**	**9.2**				**210**	**200**					**51**	**39**					**160**
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH126	SLR BH126	SLR BH126	SLR BH126	SLR BH126
					Sample ID	BH123 14-16'	BH123 2-4'	BH123 4-6'	BH123 6-8'	DUP L	BH 124 18-20'	BH 124 2-4'	BH 124 4-6'	BH 124 6-8'	DUP H	BH125 10-12	BH125 12-14	BH125 2-4	BH125 4-6	DUP H-111308	BH 126 10-12'	BH 126 16-18'	BH 126 18-20'	BH 126 20-22'	BH 126 4-6'
					Start Depth	4.27	0.61	1.22	1.83	1.83	5.49	0.61	1.22	1.83	5.49	3.05	3.66	0.61	1.22	3.05	3.05	4.88	5.49	6.1	1.22
					End Depth	4.88	1.22	1.83	2.44	2.44	6.1	1.22	1.83	2.44	6.1	3.66	4.27	1.22	1.83	3.66	3.66	5.49	6.1	6.71	1.83
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76																		**0.005**	**0.0052**	
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76																		**0.005**	**0.0057**	
PAH	Acenaphthene	µg/g	0.072	7.9	560																		**0.01**	**0.01**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15																		**0.005**	**0.01**	
PAH	Anthracene	µg/g	0.22	0.67	0.67																		**0.005**	**0.0075**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11																		**0.01**	**0.01**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13																		**0.005**	**0.01**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78																			**0.01**	**0.01**	
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13																		**0.02**	**0.02**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13																		**0.01**	**0.01**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11																		**0.01**	**0.01**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13																		**0.02**	**0.02**	
PAH	Fluoranthene	µg/g	0.69	0.69	40000																		**0.005**	**0.02**	
PAH	Fluorene	µg/g	0.19	62	62																		**0.005**	**0.005**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13																		**0.02**	**0.02**	
PAH	Naphthalene	µg/g	0.09	0.6	200																		**0.005**	**0.01**	
PAH	Phenanthrene	µg/g	0.69	6.2	270																		**0.005**	**0.02**	
PAH	Pyrene	µg/g	1	78	2600																		**0.005**	**0.03**	
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35																					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55																**20**	**10**			
PHC	F1-BTEX	µg/g	25	55	55																**20**	**10**			
PHC	F2 (C10-C16)	µg/g	10	98	230																**20**	**10**			
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300																	**54**	**23**			
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800																	**20**	**10**			
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None																			Yes	Yes			
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**					
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH123	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH124	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH125	SLR BH126	SLR BH126	SLR BH126	SLR BH126	SLR BH126
					Sample ID	BH123 14-16'	BH123 2-4'	BH123 4-6'	BH123 6-8'	DUP L	BH 124 18-20'	BH 124 2-4'	BH 124 4-6'	BH 124 6-8'	DUP H	BH125 10-12	BH125 12-14	BH125 2-4	BH125 4-6	DUP H-111308	BH 126 10-12'	BH 126 16-18'	BH 126 18-20'	BH 126 20-22'	BH 126 4-6'
					Start Depth	4.27	0.61	1.22	1.83	1.83	5.49	0.61	1.22	1.83	5.49	3.05	3.66	0.61	1.22	3.05	3.05	4.88	5.49	6.1	1.22
					End Depth	4.88	1.22	1.83	2.44	2.44	6.1	1.22	1.83	2.44	6.1	3.66	4.27	1.22	1.83	3.66	3.66	5.49	6.1	6.71	1.83
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	07 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	13 Nov 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	2-Butanone	µg/g	0.5	16	230	**0.03**			**60**	**60**	**0.03**			**3**	**0.03**	**10**	**1**			**10**				
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	**0.03**			**60**	**60**	**0.03**			**3**	**0.03**	**10**	**1**			**10**				
VOC	Acetone	µg/g	0.5	16	16	**0.1**			**300**	**300**	**0.1**			**10**	**0.1**	**50**	**5**			**50**				
VOC	Benzene	µg/g	0.02	0.21	14	**0.01**			**5**	**5**	**0.005**			**0.3**	**0.005**	**1**	**0.2**			**1**	**0.07**	**0.02**		
VOC	Bromodichloromethane	µg/g	0.05	13	50	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Bromoform	µg/g	0.05	0.27	21	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Bromomethane	µg/g	0.05	0.05	1.4	**0.003**			**8**	**8**	**0.003**			**0.4**	**0.003**	**2**	**0.2**			**2**				
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Chloroform	µg/g	0.05	0.05	9.5	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	**0.02**			**8**	**8**	**0.003**			**0.3**	**0.003**	**2**	**0.2**			**2**				
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.007**			**5**	**5**	**0.03**			**6.2**	**0.02**	**21**	**3.4**			**17**	**0.04**	**0.02**		
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Toluene	µg/g	0.2	2.3	68	**0.03**			**5**	**5**	**0.01**			**0.2**	**0.01**	**1**	**0.1**			**1**	**0.07**	**0.02**		
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	**0.002**			**5**	**5**	**0.002**			**0.2**	**0.002**	**1**	**0.1**			**1**				
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.009**			**5**	**5**	**0.007**			**0.7**	**0.007**	**9**	**1.3**			**8**	**0.04**	**0.02**		
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.03**			**5**	**5**	**0.01**			**0.4**	**0.01**	**19**	**2.2**			**15**	**0.1**	**0.04**		
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.04**			**5**	**5**	**0.02**			**1.2**	**0.02**	**28**	**3.5**			**23**	**0.14**	**0.04**		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH126	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129
						Sample ID	BH 126 6-8'	BH127 0-2'	BH127 10-12'	BH127 18-20'	BH127 22-24'	BH127 2-4'	DUP D	BH 128 0-2'	BH 128 12-14'	BH 128 16-18'	BH 128 18-20'	BH 128 2-4'	BH 128 8-10'	BH129 0-2'	BH129 10-12'	BH129 12-14'	BH129 18-20'	BH129 2-4'	BH129 4-6'	BH129 6-8'
						Start Depth	1.83	0	3.05	5.49	6.71	0.61	3.05	0	3.66	4.88	5.49	0.61	2.44	0	3.05	3.66	5.49	0.61	1.22	1.83
						End Depth	2.44	0.61	3.66	6.1	7.32	1.22	3.66	0.61	4.27	5.49	6.1	1.22	3.05	0.61	3.66	4.27	6.1	1.22	1.83	2.44
						Date	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																					
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																					
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																					
ABN	2,4-Dinitrophenol	µg/g	2	38	59																					
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																					
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																					
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																					
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																					
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																					
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																					
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																					
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																					
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																					
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																					
ABN	Phenol	µg/g	0.5	9.4	46																					
CHEMISTRY	Ammonia	µg/g																								
CHEMISTRY	Bromide	µg/g																								
CHEMISTRY	Chlorite	µg/g																								
CHEMISTRY	Fluoride	µg/g	110 [c.]																							
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																							
CHEMISTRY	Moisture, percent	%				**11**	**7.6**	**28**	**32**	**12**	**5**	**16**	**17**	**17**	**48**	**75**	**14**	**22**	**14**	**41**	**33**	**38**	**20**	**19**	**33**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																							
CHEMISTRY	Nitrite (as N)	µg/g																								
Chemistry	ortho-Phosphate	µg/g																								
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**8.43**	**10.9**				**8.03**		**7.15**				**7.34**	**7.46**	**7.02**				**7.05**	**7.44**	
CHEMISTRY	Sulfate	µg/g																								
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																								
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																					
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																					
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																					
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																					
GENCHEM	MOISTURE AT LIQUID LIMIT	%																								
INORGANIC	Aluminum	µg/g	26000 [c.]																							
INORGANIC	Antimony	µg/g	1.3	7.5		**0.41**	**0.38**				**0.2**		**7.4**				**1.7**	**1.2**	**2.3**				**2.5**	**0.2**		
INORGANIC	Arsenic	µg/g	18	18		**1.9**	**4.1**				**1**		**35**				**9.5**	**3.4**	**12**				**8.3**	**1**		
INORGANIC	Barium	µg/g	220	390		**33**	**74**				**5.7**		**250**				**84**	**73**	**120**				**120**	**8.9**		
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**	**0.32**				**0.2**		**1.1**				**0.39**	**0.34**	**0.55**				**0.44**	**0.2**		
INORGANIC	Boron	µg/g	36	120																						
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.08**	**0.17**				**0.02**		**2.5**				**2.7**	**2.1**	**0.47**				**0.55**	**0.01**		
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.12**	**0.22**				**0.1**		**0.62**				**0.44**	**0.46**	**0.52**				**1.4**	**0.1**		
INORGANIC	Calcium	µg/g	49000 [c.]																							
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																							
INORGANIC	Chromium	µg/g	70	160		**10**	**11**				**2.4**		**20**				**11**	**17**	**19**				**21**	**3.7**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**0.2**				**0.2**		**0.4**				**0.4**	**0.2**	**0.2**				**1**	**0.2**		
INORGANIC	Cobalt	µg/g	22	22		**3.2**	**16**				**0.96**		**8.6**				**4.8**	**4.6**	**6**				**8.5**	**1.4**		
INORGANIC	Copper	µg/g	92	140		**19**	**54**				**3.2**		**160**				**140**	**41**	**56**				**63**	**1.6**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.01**				**0.01**		**0.01**				**0.01**	**0.01**	**0.01**				**0.01**	**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.86**	**2**				**0.25**		**0.83**				**1.1**	**0.89**	**1.1**				**0.84**	**0.09**		
INORGANIC	Iron	µg/g	34000 [c.]																							
INORGANIC	Lead	µg/g	120	120		**28**	**32**				**1.6**		**460**				**170**	**79**	**520**				**240**	**1.4**		
INORGANIC	Magnesium	µg/g	15000 [c.]																							
INORGANIC	Manganese	µg/g	1400 [c.]																							
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**	**0.05**				**0.05**		**0.38**				**0.51**	**0.24**	**0.56**				**0.16**	**0.05**		
INORGANIC	Molybdenum	µg/g	2	6.9		**1.1**	**0.87**				**0.5**		**4.5**				**0.9**	**0.72**	**1.4**				**1.3**	**0.5**		
INORGANIC	Nickel	µg/g	82	100		**8.3**	**34**				**1.9**		**30**				**11**	**10**	**19**				**20**	**2.1**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																							
INORGANIC	Potassium	µg/g	4900 [c.]																							
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.5**				**0.5**		**1.5**				**0.69**	**0.54**	**1**				**0.54**	**0.5**		
INORGANIC	Silver	µg/g	0.5	20		**0.2**	**0.2**				**0.2**		**0.21**				**0.2**	**0.21**	**0.2**				**0.2**	**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																							
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**18**	**7.7**				**2.6**		**3.5**				**2.5**	**4.2**	**15**				**20**	**0.46**		
INORGANIC	Strontium	µg/g	77 [c.]																							
INORGANIC	Thallium	µg/g	1	1		**0.05**	**0.05**				**0.05**		**0.32**				**0.14**	**0.09**	**0.2**				**0.17**	**0.05**		
INORGANIC	Titanium	µg/g	4700 [c.]																							
INORGANIC	Uranium (U)	µg/g	2.5	23																						
INORGANIC	Vanadium	µg/g	86	86		**12**	**13**				**5.2**		**24**				**18**	**17**	**15**				**22**	**8**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																					
INORGANIC	Zinc	µg/g	290	340		**46**	**68**				**6**		**220**				**210**	**140**	**290**				**170**	**6.4**		
METAL	Zirconium	µg/g	48 [e.]																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH126	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129
						Sample ID	BH 126 6-8'	BH127 0-2'	BH127 10-12'	BH127 18-20'	BH127 22-24'	BH127 2-4'	DUP D	BH 128 0-2'	BH 128 12-14'	BH 128 16-18'	BH 128 18-20'	BH 128 2-4'	BH 128 8-10'	BH129 0-2'	BH129 10-12'	BH129 12-14'	BH129 18-20'	BH129 2-4'	BH129 4-6'	BH129 6-8'
						Start Depth	1.83	0	3.05	5.49	6.71	0.61	3.05	0	3.66	4.88	5.49	0.61	2.44	0	3.05	3.66	5.49	0.61	1.22	1.83
						End Depth	2.44	0.61	3.66	6.1	7.32	1.22	3.66	0.61	4.27	5.49	6.1	1.22	3.05	0.61	3.66	4.27	6.1	1.22	1.83	2.44
						Date	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																					
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																					
OCP	Hexachloroethane	µg/g	0.01	0.089	22																					
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																								
other SVOC	2-Chloronaphthalene	µg/g																								
other SVOC	2-Hexanone	µg/g																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																								
other SVOC	4-Chlorophenyl Phenylether	µg/g																								
other SVOC	Bis (2-chloroethoxy) methane	µg/g																								
other SVOC	Butyl benzyl phthalate	µg/g																								
other SVOC	Chloroethane	µg/g																								
other SVOC	Chloromethane	µg/g																								
other SVOC	Di-N-Butylphthalate	µg/g																								
other SVOC	Di-n-octyl phthalate	µg/g																								
other SVOC	Isophorone	µg/g																								
other SVOC	Nitrobenzene	µg/g																								
other SVOC	N-Nitrosodi-N-propylamine	µg/g																								
other SVOC	N-Nitrosodiphenylamine	µg/g																								
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																					
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**0.13**		**0.24**							**0.05**		**2.9**			**0.005**				**0.0072**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**0.01**		**0.26**							**0.07**		**4.6**			**0.005**				**0.0075**
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.27**		**0.19**							**0.11**		**2.4**			**0.01**				**0.43**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.12**		**0.005**							**0.02**		**0.19**			**0.005**				**0.04**
PAH	Anthracene	µg/g	0.22	0.67	0.67			**0.17**		**0.0085**							**0.08**		**6.9**			**0.005**				**0.23**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.15**		**0.01**							**0.05**		**9.2**			**0.01**				**0.15**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.2**		**0.005**							**0.03**		**3.8**			**0.005**				**0.09**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**0.15**		**0.01**							**0.04**		**4.8**			**0.01**				**0.1**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																					
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**0.16**		**0.02**							**0.08**		**2.5**			**0.02**				**0.06**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.05**		**0.01**							**0.04**		**0.97**			**0.01**				**0.03**
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.12**		**0.01**							**0.04**		**16**			**0.01**				**0.12**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**0.04**		**0.02**							**0.08**		**1.1**			**0.02**				**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.49**		**0.005**							**0.11**		**16**			**0.005**				**0.51**
PAH	Fluorene	µg/g	0.19	62	62			**0.26**		**0.04**							**0.06**		**6.7**			**0.005**				**0.21**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**0.14**		**0.02**							**0.08**		**1.9**			**0.02**				**0.05**
PAH	Naphthalene	µg/g	0.09	0.6	200			**0.02**		**0.01**							**0.08**		**0.51**			**0.005**				**0.01**
PAH	Phenanthrene	µg/g	0.69	6.2	270			**0.43**		**0.005**							**0.27**		**83**			**0.005**				**0.11**
PAH	Pyrene	µg/g	1	78	2600			**0.58**		**0.005**							**0.16**		**27**			**0.005**				**0.59**
PCB	Aroclor 1016	µg/g																								
PCB	Aroclor 1221	µg/g																								
PCB	Aroclor 1232	µg/g																								
PCB	Aroclor 1242	µg/g																								
PCB	Aroclor 1248	µg/g																								
PCB	Aroclor 1254	µg/g																								
PCB	Aroclor 1260	µg/g																								
PCB	Aroclor 1262	µg/g																								
PCB	Aroclor 1268	µg/g																								
PCB	PCB, Total	µg/g	0.3	0.35														**0.01**						**0.01**		
Perchlorate	Perchlorate	µg/g																								
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**	**10**						**10**	**10**					**35**		**10**			
PHC	F1-BTEX	µg/g	25	55	55			**10**	**10**						**10**	**10**					**35**		**10**			
PHC	F2 (C10-C16)	µg/g	10	98	230			**10**	**10**			**10**			**10**	**10**					**110**		**10**			
PHC	F2-Naphth	µg/g	10	98	230																					
PHC	F3 (C16-C34)	µg/g	240	300				**10**	**24**			**10**			**10**	**10**					**660**		**26**			
PHC	F3-PAH	µg/g	240	300																						
PHC	F4 (C34-C50)	µg/g	120	2800				**10**	**10**			**10**			**10**	**10**					**42**		**10**			
PHC	F4G-SG	µg/g	120	2800																						
PHC	**Chrom. to baseline at nC5No**	None						Yes	Yes			Yes			Yes	Yes					Yes		Yes			
PHC	Total Hydrocarbons (C6-C50)	µg/g																								
SVOC	Hexachlorocyclopentadiene	µg/g																								
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37																	**0.002**				
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8																	**0.002**				
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48																	**0.002**				
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120																	**0.002**				
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600																	**0.002**				
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11																	**0.002**				
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86																	**0.002**				
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60																	**0.002**				
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180																	**0.002**				
VOC	1,2-Dichloroethene (Total)	µg/g																								

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH126	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH127	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH128	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129	SLR BH129
						Sample ID	BH 126 6-8'	BH127 0-2'	BH127 10-12'	BH127 18-20'	BH127 22-24'	BH127 2-4'	DUP D	BH 128 0-2'	BH 128 12-14'	BH 128 16-18'	BH 128 18-20'	BH 128 2-4'	BH 128 8-10'	BH129 0-2'	BH129 10-12'	BH129 12-14'	BH129 18-20'	BH129 2-4'	BH129 4-6'	BH129 6-8'
						Start Depth	1.83	0	3.05	5.49	6.71	0.61	3.05	0	3.66	4.88	5.49	0.61	2.44	0	3.05	3.66	5.49	0.61	1.22	1.83
						End Depth	2.44	0.61	3.66	6.1	7.32	1.22	3.66	0.61	4.27	5.49	6.1	1.22	3.05	0.61	3.66	4.27	6.1	1.22	1.83	2.44
						Date	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76																	**0.002**				
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59																	**0.002**				
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																						
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59																	**0.002**				
VOC	2-Butanone	µg/g	0.5	16	230																	**0.04**				
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150																	**0.03**				
VOC	Acetone	µg/g	0.5	16	16																	**0.2**				
VOC	Benzene	µg/g	0.02	0.21	14			**0.04**	**0.02**						**0.02**	**0.02**					**0.02**	**0.003**	**0.02**			
VOC	Bromodichloromethane	µg/g	0.05	13	50																	**0.002**				
VOC	Bromoform	µg/g	0.05	0.27	21																	**0.002**				
VOC	Bromomethane	µg/g	0.05	0.05	1.4																	**0.003**				
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3																	**0.002**				
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4																	**0.002**				
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48																	**0.002**				
VOC	Chloroform	µg/g	0.05	0.05	9.5																	**0.002**				
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130																	**0.002**				
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05																		**0.002**				
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																					
VOC	Dichloromethane	µg/g	0.05	0.1	7.4																	**0.003**				
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.02**	**0.02**						**0.02**	**0.02**					**0.02**	**0.002**	**0.02**			
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220																	**0.002**				
VOC	n-Hexane	µg/g	0.05	2.8	54																					
VOC	Styrene	µg/g	0.05	0.7	66																	**0.002**				
VOC	Tetrachloroethene	µg/g	0.05	0.28	18																	**0.002**				
VOC	Toluene	µg/g	0.2	2.3	68			**0.02**	**0.02**						**0.02**	**0.02**					**0.13**	**0.01**	**0.02**			
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220																	**0.002**				
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05																		**0.002**				
VOC	Trichloroethylene	µg/g	0.05	0.061	300																	**0.002**				
VOC	Trichlorofluoromethane	µg/g	0.25	4																						
VOC	Vinyl Chloride	µg/g	0.02	0.02	270																	**0.002**				
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.02**	**0.02**						**0.02**	**0.02**					**0.02**	**0.003**	**0.02**			
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.04**	**0.04**						**0.04**	**0.04**					**0.04**	**0.01**	**0.04**			
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.04**	**0.04**						**0.04**	**0.04**					**0.04**	**0.01**	**0.04**			

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH132	SLR BH132	SLR BH132	SLR BH132
					Sample ID	BH 130 0-2'	BH 130 12-14'	BH 130 14-16'	BH 130 16-18'	BH 130 20-22'	BH 130 22-24'	BH 130 2-4'	BH 131 0-2'	BH 131 12-14'	BH 131 14-16'	BH 131 16-18'	BH 131 2-4'	BH 131 4-6'	BH 131 8-10'	DUP G	BH132 0-2'	BH132 16-18'	BH132 18-20'	BH132 20-22'
					Start Depth	0	3.66	4.27	4.88	6.1	6.71	0.61	0	3.66	4.27	4.88	0.61	1.22	2.44	4.27	0	4.88	5.49	6.1
					End Depth	0.61	4.27	4.88	5.49	6.71	7.32	1.22	0.61	4.27	4.88	5.49	1.22	1.83	3.05	4.88	0.61	5.49	6.1	6.71
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**8.6**	**17**	**17**	**17**	**22**	**20**	**21**	**7.5**	**27**	**69**	**35**	**11**	**21**	**20**	**19**	**7.5**	**49**	**42**	**49**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.73**	**7.44**					**7**	**7.57**				**7.4**	**6.97**			**7.48**			
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**4.6**	**0.2**					**0.82**	**21**				**1.7**	**0.2**			**0.67**			
INORGANIC	Arsenic	µg/g	18	18		**6.8**	**1.1**					**2.6**	**11**				**3.5**	**1.2**			**3.7**			
INORGANIC	Barium	µg/g	220	390		**65**	**13**					**68**	**330**				**93**	**31**			**55**			
INORGANIC	Beryllium	µg/g	2.5	4		**0.23**	**0.2**					**0.24**	**0.53**				**0.2**	**0.2**			**0.2**			
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.15**	**0.08**					**0.68**	**0.08**				**0.27**	**0.56**			**0.09**			
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.75**	**0.1**					**0.39**	**1.6**				**0.19**	**0.1**			**0.44**			
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**19**	**5.3**					**14**	**17**				**7.5**	**5.8**			**8.5**			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**0.2**					**0.2**	**0.2**				**0.4**	**1**			**0.2**			
INORGANIC	Cobalt	µg/g	22	22		**5**	**1.8**					**4.2**	**5.2**				**2.5**	**2**			**2.7**			
INORGANIC	Copper	µg/g	92	140		**83**	**3.8**					**25**	**320**				**19**	**8.2**			**32**			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.01**					**0.02**	**0.01**				**0.01**	**0.01**			**0.01**			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**1.4**	**0.25**					**1.2**	**0.19**				**0.24**	**0.9**			**0.25**			
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**190**	**4.3**					**52**	**1200**				**260**	**28**			**70**			
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.1**	**0.08**					**0.22**	**0.24**				**0.35**	**0.05**			**0.05**			
INORGANIC	Molybdenum	µg/g	2	6.9		**1.6**	**0.5**					**0.5**	**2.1**				**0.5**	**0.5**			**1.1**			
INORGANIC	Nickel	µg/g	82	100		**13**	**2.7**					**8**	**20**				**5.8**	**4**			**8**			
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.5**					**0.5**	**0.5**				**0.5**	**0.5**			**0.5**			
INORGANIC	Silver	µg/g	0.5	20		**0.23**	**0.2**					**0.31**	**0.36**				**0.2**	**0.2**			**0.2**			
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**42**	**0.92**					**22**	**0.75**				**3.1**	**6.5**			**0.64**			
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.06**	**0.05**					**0.08**	**0.1**				**0.09**	**0.05**			**0.05**			
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**21**	**11**					**16**	**20**				**11**	**8.2**			**12**			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**200**	**11**					**120**	**480**				**120**	**30**			**300**			
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH132	SLR BH132	SLR BH132	SLR BH132
					Sample ID	BH 130 0-2'	BH 130 12-14'	BH 130 14-16'	BH 130 16-18'	BH 130 20-22'	BH 130 22-24'	BH 130 2-4'	BH 131 0-2'	BH 131 12-14'	BH 131 14-16'	BH 131 16-18'	BH 131 2-4'	BH 131 4-6'	BH 131 8-10'	DUP G	BH132 0-2'	BH132 16-18'	BH132 18-20'	BH132 20-22'
					Start Depth	0	3.66	4.27	4.88	6.1	6.71	0.61	0	3.66	4.27	4.88	0.61	1.22	2.44	4.27	0	4.88	5.49	6.1
					End Depth	0.61	4.27	4.88	5.49	6.71	7.32	1.22	0.61	4.27	4.88	5.49	1.22	1.83	3.05	4.88	0.61	5.49	6.1	6.71
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**0.02**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.02**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560				**0.05**	**0.01**				**0.02**		**0.01**						**0.01**		**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**0.01**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67				**0.12**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**0.23**	**0.01**				**0.02**		**0.01**						**0.01**		**0.01**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**0.16**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**0.17**	**0.01**				**0.02**		**0.01**						**0.01**		**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**0.09**	**0.02**				**0.04**		**0.02**						**0.02**		**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**0.05**	**0.01**				**0.02**		**0.01**						**0.01**		**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**0.29**	**0.01**				**0.02**		**0.01**						**0.01**		**0.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**0.02**	**0.02**				**0.04**		**0.02**						**0.02**		**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**0.48**	**0.005**				**0.03**		**0.005**						**0.005**		**0.005**
PAH	Fluorene	µg/g	0.19	62	62				**0.07**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**0.07**	**0.02**				**0.04**		**0.02**						**0.02**		**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200				**0.01**	**0.005**				**0.01**		**0.005**						**0.005**		**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270				**1.4**	**0.01**				**0.02**		**0.02**						**0.005**		**0.005**
PAH	Pyrene	µg/g	1	78	2600				**0.62**	**0.005**				**0.04**		**0.0069**						**0.005**		**0.005**
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35								**0.01**						**0.01**						
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**			**10**				**30**				**10**				**10**	
PHC	F1-BTEX	µg/g	25	55	55			**10**			**10**				**30**				**10**				**10**	
PHC	F2 (C10-C16)	µg/g	10	98	230			**10**			**10**				**30**				**92**	**10**			**10**	
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300				**10**			**10**				**150**				**390**	**10**			**20**	
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800				**10**			**10**				**30**				**21**	**10**			**10**	
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None						Yes			Yes				Yes				Yes	Yes			Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37				**0.002**					**0.002**										
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8				**0.002**					**0.002**										
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48				**0.002**					**0.002**										
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120				**0.002**					**0.002**										
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600				**0.002**					**0.002**										
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11				**0.002**					**0.002**										
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86				**0.002**					**0.002**										
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60				**0.002**					**0.002**										
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180				**0.002**					**0.002**										
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH130	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH131	SLR BH132	SLR BH132	SLR BH132	SLR BH132
					Sample ID	BH 130 0-2'	BH 130 12-14'	BH 130 14-16'	BH 130 16-18'	BH 130 20-22'	BH 130 22-24'	BH 130 2-4'	BH 131 0-2'	BH 131 12-14'	BH 131 14-16'	BH 131 16-18'	BH 131 2-4'	BH 131 4-6'	BH 131 8-10'	DUP G	BH132 0-2'	BH132 16-18'	BH132 18-20'	BH132 20-22'
					Start Depth	0	3.66	4.27	4.88	6.1	6.71	0.61	0	3.66	4.27	4.88	0.61	1.22	2.44	4.27	0	4.88	5.49	6.1
					End Depth	0.61	4.27	4.88	5.49	6.71	7.32	1.22	0.61	4.27	4.88	5.49	1.22	1.83	3.05	4.88	0.61	5.49	6.1	6.71
					Date	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008	28 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76				**0.002**					**0.002**										
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59				**0.002**					**0.002**										
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59				**0.002**					**0.002**										
VOC	2-Butanone	µg/g	0.5	16	230				**0.03**					**0.05**										
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150				**0.03**					**0.03**										
VOC	Acetone	µg/g	0.5	16	16				**0.1**					**0.2**										
VOC	Benzene	µg/g	0.02	0.21	14			**0.02**	**0.003**		**0.02**			**0.002**	**0.06**				**0.02**			**0.02**		
VOC	Bromodichloromethane	µg/g	0.05	13	50				**0.002**					**0.002**										
VOC	Bromoform	µg/g	0.05	0.27	21				**0.002**					**0.002**										
VOC	Bromomethane	µg/g	0.05	0.05	1.4				**0.003**					**0.003**										
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3				**0.002**					**0.002**										
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4				**0.002**					**0.002**										
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48				**0.002**					**0.002**										
VOC	Chloroform	µg/g	0.05	0.05	9.5				**0.002**					**0.002**										
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130				**0.002**					**0.002**										
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05					**0.002**					**0.002**										
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4				**0.003**					**0.003**										
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.02**	**0.003**		**0.02**			**0.002**	**0.06**				**0.02**			**0.02**		
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220				**0.002**					**0.002**										
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66				**0.002**					**0.002**										
VOC	Tetrachloroethene	µg/g	0.05	0.28	18				**0.002**					**0.002**										
VOC	Toluene	µg/g	0.2	2.3	68			**0.02**	**0.01**		**0.02**			**0.009**	**0.06**				**0.07**			**0.02**		
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220				**0.002**					**0.002**										
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05					**0.002**					**0.002**										
VOC	Trichloroethylene	µg/g	0.05	0.061	300				**0.002**					**0.002**										
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270				**0.002**					**0.002**										
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.02**	**0.003**		**0.02**			**0.002**	**0.06**				**0.02**			**0.02**		
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.04**	**0.01**		**0.04**			**0.004**	**0.12**				**0.04**			**0.04**		
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.04**	**0.01**		**0.04**			**0.004**	**0.12**				**0.04**			**0.04**		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH132	SLR BH132	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH137	SLR BH137	SLR BH137	SLR BH137	SLR BH137
					Sample ID	BH132 2-4'	BH132 8-10'	BH 135 0-2'	BH 135 10-12'	BH 135 16-18'	BH 135 22-24'	BH 135 2-4'	BH 135 8-10'	BH 136 0-2'	BH 136 10-12'	BH 136 12-14'	BH 136 14-16'	BH 136 16-18'	BH 136 4-6'	BH 137 0-2'	BH 137 10-12'	BH 137 12-14'	BH 137 14-16'	BH 137 2-4'
					Start Depth	0.61	2.44	0	3.05	4.88	6.71	0.61	2.44	0	3.05	3.66	4.27	4.88	1.22	0	3.05	3.66	4.27	0.61
					End Depth	1.22	3.05	0.61	3.66	5.49	7.32	1.22	3.05	0.61	3.66	4.27	4.88	5.49	1.83	0.61	3.66	4.27	4.88	1.22
					Date	28 Oct 2008	28 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**18**	**41**	**4.1**	**18**	**24**	**50**	**15**	**18**	**6.7**	**15**	**18**	**16**	**40**	**12**	**9.3**	**17**	**36**	**23**	**22**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.12**	**7.08**	**7.32**				**7.3**		**7.31**					**7.53**	**9.28**				
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**1.1**	**0.2**	**2.1**				**0.2**		**1.5**					**0.24**	**2.7**				
INORGANIC	Arsenic	µg/g	18	18		**2.1**	**1**	**4.2**				**1**		**5**					**1.5**	**9.5**				
INORGANIC	Barium	µg/g	220	390		**59**	**27**	**70**				**9.9**		**58**					**19**	**110**				
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**	**0.2**	**0.2**				**0.2**		**0.24**					**0.2**	**0.2**				
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.29**	**0.39**	**0.38**				**0.1**		**0.18**					**0.09**	**0.6**				
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.18**	**0.1**	**0.3**				**0.1**		**0.41**					**0.1**	**1.2**				
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**6.4**	**6.8**	**20**				**4.2**		**28**					**7.5**	**21**				
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**0.4**	**0.2**				**0.2**		**0.2**					**0.2**	**0.2**				
INORGANIC	Cobalt	µg/g	22	22		**2.2**	**2.2**	**3.1**				**1.9**		**3.6**					**2.2**	**9.4**				
INORGANIC	Copper	µg/g	92	140		**29**	**9.1**	**17**				**3.2**		**43**					**7.3**	**170**				
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.01**	**0.01**				**0.01**		**0.01**					**0.01**	**0.01**				
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.19**	**0.21**	**0.3**				**0.26**		**1**					**0.34**	**0.43**				
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**190**	**13**	**370**				**2.3**		**160**					**21**	**210**				
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.09**	**0.08**	**0.11**				**0.05**		**0.32**					**0.05**	**0.22**				
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**	**0.5**	**0.69**				**0.5**		**1.2**					**0.5**	**2.6**				
INORGANIC	Nickel	µg/g	82	100		**5**	**3.8**	**7.4**				**2.6**		**13**					**4.3**	**12**				
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.5**	**0.5**				**0.5**		**0.5**					**0.5**	**0.53**				
INORGANIC	Silver	µg/g	0.5	20		**0.2**	**0.2**	**0.2**				**0.2**		**0.28**					**0.2**	**0.59**				
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1**	**0.71**	**2.8**				**5.7**		**4.2**					**2.5**	**0.28**				
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.05**	**0.05**	**0.06**				**0.05**		**0.07**					**0.05**	**0.05**				
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**11**	**7.6**	**10**				**8.6**		**12**					**15**	**19**				
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**120**	**26**	**170**				**9.3**		**290**					**38**	**420**				
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH132	SLR BH132	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH137	SLR BH137	SLR BH137	SLR BH137	SLR BH137
					Sample ID	BH132 2-4'	BH132 8-10'	BH 135 0-2'	BH 135 10-12'	BH 135 16-18'	BH 135 22-24'	BH 135 2-4'	BH 135 8-10'	BH 136 0-2'	BH 136 10-12'	BH 136 12-14'	BH 136 14-16'	BH 136 16-18'	BH 136 4-6'	BH 137 0-2'	BH 137 10-12'	BH 137 12-14'	BH 137 14-16'	BH 137 2-4'
					Start Depth	0.61	2.44	0	3.05	4.88	6.71	0.61	2.44	0	3.05	3.66	4.27	4.88	1.22	0	3.05	3.66	4.27	0.61
					End Depth	1.22	3.05	0.61	3.66	5.49	7.32	1.22	3.05	0.61	3.66	4.27	4.88	5.49	1.83	0.61	3.66	4.27	4.88	1.22
					Date	28 Oct 2008	28 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**0.72**				**140**			**0.01**		**78**			**0.0052**	**0.02**		
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.76**				**170**			**0.01**		**80**			**0.005**	**0.02**		
PAH	Acenaphthene	µg/g	0.072	7.9	560				**0.63**				**120**			**0.01**		**34**			**0.01**	**0.04**		
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**0.28**				**9.1**			**0.005**		**47**			**0.005**	**0.01**		
PAH	Anthracene	µg/g	0.22	0.67	0.67				**0.43**				**61**			**0.01**		**36**			**0.0096**	**0.02**		
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**1.6**				**35**			**0.01**		**42**			**0.01**	**0.04**		
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**1.9**				**29**			**0.005**		**24**			**0.01**	**0.03**		
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**1.9**				**22**			**0.01**		**25**			**0.01**	**0.03**		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**0.99**				**12**			**0.02**		**11**			**0.02**	**0.02**		
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**0.74**				**9.3**			**0.01**		**9**			**0.01**	**0.01**		
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**1.3**				**28**			**0.01**		**42**			**0.01**	**0.03**		
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**0.28**				**3.3**			**0.02**		**3.8**			**0.02**	**0.02**		
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**1.4**				**62**			**0.02**		**83**			**0.02**	**0.07**		
PAH	Fluorene	µg/g	0.19	62	62				**0.24**				**50**			**0.0069**		**64**			**0.0062**	**0.01**		
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**1.1**				**11**			**0.02**		**11**			**0.02**	**0.02**		
PAH	Naphthalene	µg/g	0.09	0.6	200				**1.3**				**210**			**0.03**		**180**			**0.005**	**0.02**		
PAH	Phenanthrene	µg/g	0.69	6.2	270				**1.2**				**160**			**0.03**		**200**			**0.02**	**0.07**		
PAH	Pyrene	µg/g	1	78	2600				**1.5**				**89**			**0.02**		**120**			**0.03**	**0.09**		
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35								**0.01**												**0.02**
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55		**10**			**25**	**750**				**10**		**10**					**10**		
PHC	F1-BTEX	µg/g	25	55	55		**10**			**17**	**340**				**10**		**10**					**10**		
PHC	F2 (C10-C16)	µg/g	10	98	230		**120**			**920**	**7500**				**10**		**10**					**10**		
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300			**800**			**1000**	**7100**				**10**		**10**					**10**		
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800			**65**			**29**	**710**				**10**		**10**					**10**		
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None					Yes			Yes	Yes				Yes		Yes					Yes		
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180				**0.002**				**0.002**			**0.002**		**4**			**0.002**	**0.002**		
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH132	SLR BH132	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH135	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH136	SLR BH137	SLR BH137	SLR BH137	SLR BH137	SLR BH137
						Sample ID	BH132 2-4'	BH132 8-10'	BH 135 0-2'	BH 135 10-12'	BH 135 16-18'	BH 135 22-24'	BH 135 2-4'	BH 135 8-10'	BH 136 0-2'	BH 136 10-12'	BH 136 12-14'	BH 136 14-16'	BH 136 16-18'	BH 136 4-6'	BH 137 0-2'	BH 137 10-12'	BH 137 12-14'	BH 137 14-16'	BH 137 2-4'
						Start Depth	0.61	2.44	0	3.05	4.88	6.71	0.61	2.44	0	3.05	3.66	4.27	4.88	1.22	0	3.05	3.66	4.27	0.61
						End Depth	1.22	3.05	0.61	3.66	5.49	7.32	1.22	3.05	0.61	3.66	4.27	4.88	5.49	1.83	0.61	3.66	4.27	4.88	1.22
						Date	28 Oct 2008	28 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008	30 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																					
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	2-Butanone	µg/g	0.5	16	230				**0.03**				**0.03**				**0.03**		**50**			**0.03**	**0.04**		
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150				**0.03**				**0.03**				**0.03**		**50**			**0.03**	**0.03**		
VOC	Acetone	µg/g	0.5	16	16				**0.1**				**0.1**				**0.1**		**200**			**0.1**	**0.2**		
VOC	Benzene	µg/g	0.02	0.21	14		**0.02**		**0.02**	**2.1**	**53**		**0.02**		**0.02**		**0.003**	**0.02**	**26**			**0.005**	**0.005**	**0.02**	
VOC	Bromodichloromethane	µg/g	0.05	13	50				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Bromoform	µg/g	0.05	0.27	21				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Bromomethane	µg/g	0.05	0.05	1.4				**0.003**				**0.003**				**0.003**		**6**			**0.003**	**0.003**		
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48				**0.002**				**0.002**				**0.002**		4			**0.002**	**0.002**		
VOC	Chloroform	µg/g	0.05	0.05	9.5				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05					**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																				
VOC	Dichloromethane	µg/g	0.05	0.1	7.4				**0.003**				**0.003**				**0.003**		**6**			**0.003**	**0.003**		
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.02**		**0.17**	**3.7**	**160**		**0.34**		**0.02**		**0.002**	**0.02**	**110**			**0.004**	**0.002**	**0.02**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	n-Hexane	µg/g	0.05	2.8	54																				
VOC	Styrene	µg/g	0.05	0.7	66				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Tetrachloroethene	µg/g	0.05	0.28	18				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Toluene	µg/g	0.2	2.3	68		**0.02**		**0.02**	**0.51**	**91**		**0.02**		**0.02**		**0.009**	**0.02**	**28**			**0.01**	**0.01**	**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05					**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Trichloroethylene	µg/g	0.05	0.061	300				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Trichlorofluoromethane	µg/g	0.25	4																					
VOC	Vinyl Chloride	µg/g	0.02	0.02	270				**0.002**				**0.002**				**0.002**		**4**			**0.002**	**0.002**		
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.02**		**0.05**	**0.54**	**37**		**0.08**		**0.02**		**0.002**	**0.02**	**45**			**0.004**	**0.005**	**0.02**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**0.04**		**0.1**	**0.81**	**76**		**0.07**		**0.04**		**0.008**	**0.04**	**85**			**0.01**	**0.01**	**0.04**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.04**		**0.15**	**1.3**	**110**		**0.16**		**0.04**		**0.01**	**0.04**	**130**			**0.01**	**0.01**	**0.04**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH137	SLR BH137	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139
					Sample ID	BH 137 4-6'	BH 137 8-10'	BH138 0-2'	BH138 10-12'	BH138 10-12'-0908	BH138 12-14'	BH138 14-16'	BH138 16-18'	BH138 18-20'	BH138 4-6'	BH138 6-8'	BH138 8-10'	BH138 8-10'-092608	BH139 10-12'	BH139 12-14'	BH139 16-18	BH139 18-20'	BH139 22-24'	BH139 6-8'
					Start Depth	1.22	2.44	0	3.05	3.05	3.66	4.27	4.88	5.49	1.22	1.83	2.44	2.44	3.05	3.66	4.88	5.49	6.71	1.83
					End Depth	1.83	3.05	0.61	3.66	3.66	4.27	4.88	5.49	6.1	1.83	2.44	3.05	3.05	3.66	4.27	5.49	6.1	7.32	2.44
					Date	30 Oct 2008	30 Oct 2008	24 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**20**	**21**	**1.5**	**20**	**18**	**31**	**28**	**17**	**60**	**14**	**14**	**16**	**17**	**32**	**20**	**17**	**16**	**14**	**25**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.39**					**7.45**							**7.89**	**7.65**			**7.66**		
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**					**0.2**							**0.2**	**0.2**			**0.2**		
INORGANIC	Arsenic	µg/g	18	18		**1.1**					**1**							**1**	**1**			**1.8**		
INORGANIC	Barium	µg/g	220	390		**20**					**32**							**6.4**	**12**			**7.3**		
INORGANIC	Beryllium	µg/g	2.5	4		**0.22**					**0.2**							**0.2**	**0.2**			**0.2**		
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.42**					**0.18**							**0.13**	**0.05**			**0.22**		
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**					**0.1**							**0.1**	**0.1**			**0.1**		
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**8.1**					**5.9**							**3**	**2.7**			**3.5**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**					**2**							**0.2**	**0.2**			**0.2**		
INORGANIC	Cobalt	µg/g	22	22		**3.7**					**2.4**							**1.3**	**1.5**			**2**		
INORGANIC	Copper	µg/g	92	140		**7**					**4.5**							**1.9**	**1.8**			**4.8**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**					**0.01**							**0.01**	**0.01**			**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.16**					**0.27**							**0.11**	**0.12**			**0.17**		
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**5.5**					**2.1**							**1.9**	**2.8**			**2.9**		
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**					**0.05**							**0.05**	**0.13**			**0.05**		
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**					**0.5**							**0.5**	**0.5**			**0.5**		
INORGANIC	Nickel	µg/g	82	100		**6.9**					**4.1**							**2.1**	**2.4**			**3.8**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**					**0.5**							**0.5**	**0.5**			**0.5**		
INORGANIC	Silver	µg/g	0.5	20		**0.2**					**0.2**							**0.2**	**0.2**			**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.36**					**2.5**							**0.9**	**1.5**			**0.34**		
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.05**					**0.05**							**0.05**	**0.05**			**0.05**		
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**13**					**9.2**							**5.3**	**5.5**			**6.6**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**18**					**13**							**8.7**	**6.6**			**14**		
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH137	SLR BH137	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139
						Sample ID	BH 137 4-6'	BH 137 8-10'	BH138 0-2'	BH138 10-12'	BH138 10-12'-0908	BH138 12-14'	BH138 14-16'	BH138 16-18'	BH138 18-20'	BH138 4-6'	BH138 6-8'	BH138 8-10'	BH138 8-10'-092608	BH139 10-12'	BH139 12-14'	BH139 16-18	BH139 18-20'	BH139 22-24'	BH139 6-8'
						Start Depth	1.22	2.44	0	3.05	3.05	3.66	4.27	4.88	5.49	1.22	1.83	2.44	2.44	3.05	3.66	4.88	5.49	6.71	1.83
						End Depth	1.83	3.05	0.61	3.66	3.66	4.27	4.88	5.49	6.1	1.83	2.44	3.05	3.05	3.66	4.27	5.49	6.1	7.32	2.44
						Date	30 Oct 2008	30 Oct 2008	24 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76					**3.2**						**79**						**2.6**			**5.1**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76					**0.06**						**34**						**2.3**			**4**
PAH	Acenaphthene	µg/g	0.072	7.9	560					**0.09**						**2.5**						**0.07**			**0.36**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15					**0.02**						**0.1**						**0.005**			**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67					**0.02**						**0.75**						**0.04**			**0.17**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11					**0.01**						**0.2**						**0.01**			**0.07**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13					**0.005**						**0.1**						**0.0087**			**0.05**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78						**0.01**						**0.2**						**0.01**			**0.05**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13					**0.02**						**0.4**						**0.02**			**0.03**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13					**0.01**						**0.2**						**0.01**			**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11					**0.01**						**0.2**						**0.01**			**0.07**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13					**0.02**						**0.4**						**0.02**			**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000					**0.01**						**0.19**						**0.02**			**0.13**
PAH	Fluorene	µg/g	0.19	62	62					**0.14**						**3.6**						**0.12**			**0.45**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13					**0.02**						**0.4**						**0.02**			**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200					**0.08**						**2.5**						**0.07**			**2.4**
PAH	Phenanthrene	µg/g	0.69	6.2	270					**0.19**						**5.9**						**0.32**			**1**
PAH	Pyrene	µg/g	1	78	2600					**0.02**						**0.5**						**0.04**			**0.26**
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35																					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55		**10**	**180**	**380**			**10**	**10**	**30**	**3800**	**4000**	**910**			**3500**	**2500**				
PHC	F1-BTEX	µg/g	25	55	55		**10**	**170**	**380**			**10**	**10**	**30**	**3700**	**4000**	**910**			**3500**	**2500**				
PHC	F2 (C10-C16)	µg/g	10	98	230		**10**	**250**	**1200**			**42**	**120**	**30**	**14000**	**20000**	**3600**			**4300**	**2300**				
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300			**10**	**1300**	**290**			**16**	**43**	**92**	**3400**	**3700**	**810**			**770**	**600**				
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800			**10**	**8600**	**10**			**10**	**10**	**30**	**70**	**130**	**16**			**100**	**100**				
PHC	F4G-SG	µg/g	120	2800				**30000**						**610**											
PHC	**Chrom. to baseline at nC5No**	None					Yes	**No**	Yes			Yes	Yes	**No**	Yes	Yes	Yes			Yes	Yes				
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37								**0.002**			**2**							**0.002**		
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8								**0.002**			**2**							**0.002**		
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48								**0.002**			**2**							**0.002**		
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120								**0.002**			**2**							**0.002**		
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600								**0.002**			**2**							**0.002**		
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11								**0.002**			**2**							**0.002**		
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86								**0.002**			**2**							**0.002**		
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60								**0.002**			**2**							**0.002**		
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180								**0.002**			**2**							**0.002**		
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH137	SLR BH137	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH138	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139	SLR BH139
					Sample ID	BH 137 4-6'	BH 137 8-10'	BH138 0-2'	BH138 10-12'	BH138 10-12'-0908	BH138 12-14'	BH138 14-16'	BH138 16-18'	BH138 18-20'	BH138 4-6'	BH138 6-8'	BH138 8-10'	BH138 8-10'-092608	BH139 10-12'	BH139 12-14'	BH139 16-18	BH139 18-20'	BH139 22-24'	BH139 6-8'
					Start Depth	1.22	2.44	0	3.05	3.05	3.66	4.27	4.88	5.49	1.22	1.83	2.44	2.44	3.05	3.66	4.88	5.49	6.71	1.83
					End Depth	1.83	3.05	0.61	3.66	3.66	4.27	4.88	5.49	6.1	1.83	2.44	3.05	3.05	3.66	4.27	5.49	6.1	7.32	2.44
					Date	30 Oct 2008	30 Oct 2008	24 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	24 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76								**0.002**			**2**						**0.002**	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59								**0.002**			**2**						**0.002**	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																			
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59								**0.002**			**2**						**0.002**	
VOC	2-Butanone	µg/g	0.5	16	230								**0.03**			**30**						**0.03**	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150								**0.03**			**30**						**0.03**	
VOC	Acetone	µg/g	0.5	16	16								**0.1**			**100**						**0.1**	
VOC	Benzene	µg/g	0.02	0.21	14		**0.02**	**0.78**	**0.05**			**0.02**	**0.43**	**0.7**	**1.3**	**2**	**0.2**		**0.2**	**0.4**		**0.009**	
VOC	Bromodichloromethane	µg/g	0.05	13	50								**0.002**			**2**						**0.002**	
VOC	Bromoform	µg/g	0.05	0.27	21								**0.002**			**2**						**0.002**	
VOC	Bromomethane	µg/g	0.05	0.05	1.4								**0.003**			**3**						**0.003**	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3								**0.002**			**2**						**0.002**	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4								**0.002**			**2**						**0.002**	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48								**0.002**			**2**						**0.002**	
VOC	Chloroform	µg/g	0.05	0.05	9.5								**0.002**			**2**						**0.002**	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130								**0.002**			**2**						**0.002**	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05									**0.002**			**2**						**0.002**	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																		
VOC	Dichloromethane	µg/g	0.05	0.1	7.4								**0.003**			**3**						**0.003**	
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.02**	**2.2**	**0.16**			**0.02**	**0.01**	**0.03**	**11**	**2**	**1.1**		**9.1**	**11**		**0.01**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220								**0.002**			**2**						**0.002**	
VOC	n-Hexane	µg/g	0.05	2.8	54																		
VOC	Styrene	µg/g	0.05	0.7	66								**0.002**			**2**						**0.002**	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18								**0.002**			**2**						**0.002**	
VOC	Toluene	µg/g	0.2	2.3	68		**0.02**	**0.17**	**0.02**			**0.02**	**0.009**	**0.03**	**0.4**	**2**	**0.2**		**0.2**	**0.56**		**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220								**0.002**			**2**						**0.002**	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05									**0.002**			**2**						**0.002**	
VOC	Trichloroethylene	µg/g	0.05	0.061	300								**0.002**			**2**						**0.002**	
VOC	Trichlorofluoromethane	µg/g	0.25	4																			
VOC	Vinyl Chloride	µg/g	0.02	0.02	270								**0.002**			**2**						**0.002**	
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.02**	**0.27**	**0.13**			**0.02**	**0.007**	**0.03**	**1.5**	**2**	**0.47**		**1.2**	**0.95**		**0.006**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**0.04**	**1.3**	**0.06**			**0.04**	**0.21**	**0.12**	**1.4**	**2**	**0.4**		**2.1**	**6.6**		**0.02**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.04**	**1.6**	**0.2**			**0.04**	**0.21**	**0.12**	**2.9**	**2**	**0.47**		**3.3**	**7.5**		**0.02**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH139	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142
					Sample ID	BH139 8-10'	BH140 14-16'	BH140 16-18'	BH140 18-20'	BH140 4-6'	BH140 6-8'	BH140 8-10'	BH141 12-14'	BH141 18-20'	BH141 4-6'	BH141 6-8'	BH141 8-10'	BH142 10-12'	BH142 10-12'-092908	BH142 12-14'	BH142 16-18'	BH142 24-26'	BH142 26-28'	BH142 4-6'
					Start Depth	2.44	4.27	4.88	5.49	1.22	1.83	2.44	3.66	5.49	1.22	1.83	2.44	3.05	3.05	3.66	4.88	7.32	7.92	1.22
					End Depth	3.05	4.88	5.49	6.1	1.83	2.44	3.05	4.27	6.1	1.83	2.44	3.05	3.66	3.66	4.27	5.49	7.92	8.53	1.83
					Date	26 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**15**	**14**	**19**	**27**	**12**	**19**	**18**	**12**	**10**	**6.7**	**20**	**12**	**13**	**13**	**16**	**13**	**13**	**12**	**7.3**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]							**8.41**		**7.83**	**8.18**		**7.71**						**7.98**			**9.06**
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5						**0.2**		**0.2**	**0.2**		**0.2**						**0.2**		**0.56**
INORGANIC	Arsenic	µg/g	18	18						**1**		**1.2**	**1.5**		**1**						**1.2**		**1.1**
INORGANIC	Barium	µg/g	220	390						**5.9**		**7.2**	**8**		**6.6**						**7.1**		**7.5**
INORGANIC	Beryllium	µg/g	2.5	4						**0.2**		**0.2**	**0.2**		**0.2**						**0.2**		**0.2**
INORGANIC	Boron	µg/g	36	120																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5						**0.08**		**0.03**	**0.08**		**0.11**						**0.08**		**0.19**
INORGANIC	Cadmium	µg/g	1.2	1.2						**0.1**		**0.1**	**0.1**		**0.1**						**0.1**		**0.1**
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160						**2.9**		**3.4**	**6.4**		**2.9**						**4.2**		**5.5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8						**0.2**		**0.2**	**0.2**		**0.2**						**0.2**		**0.2**
INORGANIC	Cobalt	µg/g	22	22						**1.5**		**1.8**	**1.5**		**1.3**						**1.5**		**1.5**
INORGANIC	Copper	µg/g	92	140						**2.5**		**2.1**	**4.2**		**3.8**						**3.1**		**3.6**
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02					**0.01**		**0.01**	**0.01**		**0.01**						**0.2**		**0.05**
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7						**0.32**		**0.27**	**0.16**		**0.46**						**0.27**		**0.33**
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120						**2.8**		**2**	**8.3**		**4**						**3.7**		**13**
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14					**0.05**		**0.05**	**0.05**		**0.05**						**0.05**		**0.05**
INORGANIC	Molybdenum	µg/g	2	6.9						**0.5**		**0.5**	**0.68**		**0.5**						**0.5**		**0.51**
INORGANIC	Nickel	µg/g	82	100						**2.4**		**2.4**	**3.2**		**2.5**						**2.5**		**2.6**
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4						**0.5**		**0.5**	**0.5**		**0.5**						**0.5**		**0.5**
INORGANIC	Silver	µg/g	0.5	20						**0.2**		**0.2**	**0.2**		**0.2**						**0.2**		**0.2**
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000						**1.5**		**1.3**	**0.22**		**0.3**						**0.35**		**0.42**
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1						**0.05**		**0.05**	**0.05**		**0.05**						**0.05**		**0.05**
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23																			
INORGANIC	Vanadium	µg/g	86	86						**6.1**		**7.8**	**6.5**		**6.9**						**6.3**		**6.6**
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																		
INORGANIC	Zinc	µg/g	290	340						**8.5**		**7.9**	**15**		**11**						**11**		**13**
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH139	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142
					Sample ID	BH139 8-10'	BH140 14-16'	BH140 16-18'	BH140 18-20'	BH140 4-6'	BH140 6-8'	BH140 8-10'	BH141 12-14'	BH141 18-20'	BH141 4-6'	BH141 6-8'	BH141 8-10'	BH142 10-12'	BH142 10-12'-092908	BH142 12-14'	BH142 16-18'	BH142 24-26'	BH142 26-28'	BH142 4-6'
					Start Depth	2.44	4.27	4.88	5.49	1.22	1.83	2.44	3.66	5.49	1.22	1.83	2.44	3.05	3.05	3.66	4.88	7.32	7.92	1.22
					End Depth	3.05	4.88	5.49	6.1	1.83	2.44	3.05	4.27	6.1	1.83	2.44	3.05	3.66	3.66	4.27	5.49	7.92	8.53	1.83
					Date	26 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**				**0.17**		**0.67**			**0.03**				**0.005**			
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**				**0.15**		**0.78**			**0.005**				**0.005**			
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.01**				**0.01**		**0.08**			**0.05**				**0.01**			
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.005**				**0.005**		**0.04**			**0.03**				**0.0067**			
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.02**				**0.01**		**0.11**			**0.08**				**0.0068**			
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.02**				**0.01**		**0.11**			**0.11**				**0.05**			
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.03**				**0.0055**		**0.08**			**0.12**				**0.03**			
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			**0.02**				**0.01**		**0.12**			**0.12**				**0.03**			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.02**				**0.02**		**0.06**			**0.09**				**0.02**			
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.01**				**0.01**		**0.03**			**0.03**				**0.01**			
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.02**				**0.01**		**0.09**			**0.09**				**0.04**			
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.02**				**0.02**		**0.02**			**0.02**				**0.02**			
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.05**				**0.01**		**0.34**			**0.25**				**0.07**			
PAH	Fluorene	µg/g	0.19	62	62		**0.01**				**0.01**		**0.13**			**0.07**				**0.005**			
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.02**				**0.02**		**0.06**			**0.06**				**0.02**			
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.005**				**0.12**		**1.2**			**0.04**				**0.005**			
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.01**				**0.05**		**0.55**			**0.04**				**0.008**			
PAH	Pyrene	µg/g	1	78	2600		**0.06**				**0.03**		**0.36**			**0.46**				**0.09**			
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55				**10**		**6900**	**10**		**120**		**550**	**2500**	**10**				**10**	**10**
PHC	F1-BTEX	µg/g	25	55	55				**10**		**6800**	**10**		**120**		**550**	**2500**	**10**				**10**	**10**
PHC	F2 (C10-C16)	µg/g	10	98	230				**60**		**1500**	**10**		**98**		**730**	**940**	**10**				**10**	**10**
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300					**270**		**320**	**10**		**86**		**570**	**570**	**10**				**10**	**130**
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800					**25**		**53**	**10**		**25**		**170**	**160**	**10**				**10**	**78**
PHC	F4G-SG	µg/g	120	2800																			**380**
PHC	**Chrom. to baseline at nC5No**	None							Yes		Yes	Yes		Yes		Yes	Yes	Yes				Yes	**No**
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**				
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH139	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH140	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH141	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142	SLR BH142
						Sample ID	BH139 8-10'	BH140 14-16'	BH140 16-18'	BH140 18-20'	BH140 4-6'	BH140 6-8'	BH140 8-10'	BH141 12-14'	BH141 18-20'	BH141 4-6'	BH141 6-8'	BH141 8-10'	BH142 10-12'	BH142 10-12'-092908	BH142 12-14'	BH142 16-18'	BH142 24-26'	BH142 26-28'	BH142 4-6'
						Start Depth	2.44	4.27	4.88	5.49	1.22	1.83	2.44	3.66	5.49	1.22	1.83	2.44	3.05	3.05	3.66	4.88	7.32	7.92	1.22
						End Depth	3.05	4.88	5.49	6.1	1.83	2.44	3.05	4.27	6.1	1.83	2.44	3.05	3.66	3.66	4.27	5.49	7.92	8.53	1.83
						Date	26 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	25 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	2-Butanone	µg/g	0.5	16	230	**5**		**0.03**					**1**				**5**		**0.03**					
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	**5**		**0.03**					**1**				**5**		**0.03**					
VOC	Acetone	µg/g	0.5	16	16	**20**		**0.1**					**5**				**20**		**0.1**					
VOC	Benzene	µg/g	0.02	0.21	14	**0.4**		**0.007**	**0.02**		**0.4**	**0.02**	**0.1**	**0.02**		**0.2**	**0.4**	**0.02**	**0.006**			**0.02**	**0.02**	
VOC	Bromodichloromethane	µg/g	0.05	13	50	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Bromoform	µg/g	0.05	0.27	21	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Bromomethane	µg/g	0.05	0.05	1.4	**0.6**		**0.003**					**0.2**				**0.6**		**0.003**					
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Chloroform	µg/g	0.05	0.05	9.5	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	**0.6**		**0.003**					**0.2**				**0.6**		**0.003**					
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.7**		**0.004**	**0.02**		**9.7**	**0.02**	**0.7**	**0.22**		**1.2**	**8**	**0.02**	**0.01**			**0.02**	**0.02**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Toluene	µg/g	0.2	2.3	68	**0.4**		**0.01**	**0.02**		**0.4**	**0.02**	**0.1**	**0.02**		**0.2**	**0.4**	**0.02**	**0.03**			**0.02**	**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	**0.4**		**0.002**					**0.1**				**0.4**		**0.002**					
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.4**		**0.01**	**0.02**		**6.7**	**0.02**	**0.2**	**0.05**		**0.28**	**1**	**0.02**	**0.01**			**0.02**	**0.02**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**1.3**		**0.03**	**0.04**		**95**	**0.04**	**0.7**	**0.06**		**2.1**	**18**	**0.04**	**0.11**			**0.04**	**0.07**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**1.3**		**0.04**	**0.04**		**100**	**0.04**	**0.9**	**0.12**		**2.4**	**19**	**0.04**	**0.12**			**0.04**	**0.07**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH142	SLR BH142	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH145	SLR BH145	SLR BH145	SLR BH145	SLR BH145
					Sample ID	BH142 6-8'	BH142 8-10'	BH143 10-12	BH143 12-14	BH143 2-4	BH143 28-30	BH143 8-10	BH144 10-12'	BH144 18-20'	BH144 2-4'	BH144 4-6'	BH144 6-8'	DUP A	BH145 10-12'METALS	BH145 10-12'PAH	BH145 14-16'	BH145 14-16'VOC	BH145 4-6'
					Start Depth	1.83	2.44	3.05	3.66	0.61	8.53	2.44	3.05	5.49	0.61	1.22	1.83	1.22	3.05	3.05	4.27	4.27	1.22
					End Depth	2.44	3.05	3.66	4.27	1.22	9.14	3.05	3.66	6.1	1.22	1.83	2.44	1.83	3.66	3.66	4.88	4.88	1.83
					Date	29 Sep 2008	29 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**16**	**29**	**30**	**24**	**31**	**12**	**35**	**32**	**11**	**10**	**25**	**14**	**13**	**15**	**20**	**13**	**15**	**18**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]						**7.34**			**7.7**		**8.07**			**8**		**8.14**				
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5					**0.26**			**1**		**0.2**			**0.2**		**0.2**				
INORGANIC	Arsenic	µg/g	18	18					**2**			**5.4**		**1.8**			**1.4**		**1**				
INORGANIC	Barium	µg/g	220	390					**70**			**120**		**25**			**20**		**8.4**				
INORGANIC	Beryllium	µg/g	2.5	4					**0.2**			**0.35**		**0.2**			**0.2**		**0.2**				
INORGANIC	Boron	µg/g	36	120																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5					**1.5**			**1.9**		**0.19**			**0.06**		**0.2**				
INORGANIC	Cadmium	µg/g	1.2	1.2					**0.22**			**0.3**		**0.1**			**0.1**		**0.1**				
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160					**9.2**			**12**		**5.9**			**4.2**		**3.9**				
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8					**0.4**			**2**		**0.2**			**0.2**		**0.2**				
INORGANIC	Cobalt	µg/g	22	22					**3.5**			**5.3**		**2.9**			**1.9**		**1.6**				
INORGANIC	Copper	µg/g	92	140					**44**			**100**		**5.1**			**5**		**3.1**				
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02				**0.01**			**0.01**		**0.01**			**0.01**		**0.01**				
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7					**0.37**			**0.52**		**0.13**			**0.15**		**0.14**				
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120					**28**			**64**		**5.3**			**4.8**		**8.9**				
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14				**0.12**			**0.29**		**0.05**			**0.05**		**0.05**				
INORGANIC	Molybdenum	µg/g	2	6.9					**0.5**			**1.1**		**0.5**			**0.5**		**0.5**				
INORGANIC	Nickel	µg/g	82	100					**7.5**			**12**		**5.1**			**3.6**		**2.5**				
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4					**0.5**			**0.53**		**0.5**			**0.5**		**0.5**				
INORGANIC	Silver	µg/g	0.5	20					**0.2**			**0.2**		**0.2**			**0.2**		**0.2**				
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000					**1**			**1.5**		**0.42**			**0.28**		**0.33**				
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1					**0.05**			**0.09**		**0.05**			**0.05**		**0.05**				
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23																			
INORGANIC	Vanadium	µg/g	86	86					**14**			**17**		**8.7**			**7.2**		**5.7**				
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																		
INORGANIC	Zinc	µg/g	290	340					**60**			**120**		**45**			**13**		**11**				
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH142	SLR BH142	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH145	SLR BH145	SLR BH145	SLR BH145	SLR BH145
					Sample ID	BH142 6-8'	BH142 8-10'	BH143 10-12	BH143 12-14	BH143 2-4	BH143 28-30	BH143 8-10	BH144 10-12'	BH144 18-20'	BH144 2-4'	BH144 4-6'	BH144 6-8'	DUP A	BH145 10-12'METALS	BH145 10-12'PAH	BH145 14-16'	BH145 14-16'VOC	BH145 4-6'
					Start Depth	1.83	2.44	3.05	3.66	0.61	8.53	2.44	3.05	5.49	0.61	1.22	1.83	1.22	3.05	3.05	4.27	4.27	1.22
					End Depth	2.44	3.05	3.66	4.27	1.22	9.14	3.05	3.66	6.1	1.22	1.83	2.44	1.83	3.66	3.66	4.88	4.88	1.83
					Date	29 Sep 2008	29 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**	**32**		**1.5**			**11**		**4.6**					**0.31**			
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**	**33**		**2.1**			**11**		**0.14**					**0.35**			
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.01**	**31**		**0.2**			**8.6**		**0.2**					**0.06**			
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.01**	**3.5**		**0.18**			**0.84**		**0.005**					**0.01**			
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.01**	**13**		**0.66**			**4**		**0.25**					**0.06**			
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.05**	**8**		**1.4**			**2.8**		**0.04**					**0.06**			
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.03**	**3.4**		**1.3**			**2.2**		**0.02**					**0.06**			
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			**0.03**	**5.1**		**1.4**			**2.3**		**0.02**					**0.06**			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.02**	**2.7**		**1.8**			**1.2**		**0.02**					**0.04**			
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.01**	**1.6**		**0.41**			**0.71**		**0.01**					**0.02**			
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.04**	**5.3**		**1.4**			**2.3**		**0.11**					**0.06**			
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.02**	**0.63**		**0.4**			**0.3**		**0.02**					**0.02**			
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.11**	**14**		**1.2**			**3.9**		**0.05**					**0.11**			
PAH	Fluorene	µg/g	0.19	62	62		**0.005**	**9.6**		**0.17**			**3.9**		**0.44**					**0.07**			
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.02**	**2.1**		**0.87**			**1.2**		**0.02**					**0.03**			
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.005**	**57**		**0.71**			**25**		**0.28**					**0.12**			
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.0077**	**44**		**4**			**14**		**0.93**					**0.29**			
PAH	Pyrene	µg/g	1	78	2600		**0.13**	**17**		**2.5**			**5.5**		**0.29**					**0.18**			
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55			**210**			**10**			**23**	**2000**	**52**	**79**				**46**		**760**
PHC	F1-BTEX	µg/g	25	55	55			**120**			**10**			**22**	**2000**	**52**	**79**				**45**		**740**
PHC	F2 (C10-C16)	µg/g	10	98	230			**1700**			**31**			**1000**	**16000**	**460**	**410**	**140**			**250**		**1600**
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300				**1500**			**10**			**1200**	**3700**	**410**	**480**	**56**			**240**		**1300**
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800				**120**			**10**			**120**	**670**	**40**	**92**	**10**			**82**		**420**
PHC	F4G-SG	µg/g	120	2800																			
PHC	**Chrom. to baseline at nC5No**	None						Yes			Yes			Yes	Yes	Yes	Yes	Yes			Yes		Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH142	SLR BH142	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH143	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH144	SLR BH145	SLR BH145	SLR BH145	SLR BH145	SLR BH145
						Sample ID	BH142 6-8'	BH142 8-10'	BH143 10-12	BH143 12-14	BH143 2-4	BH143 28-30	BH143 8-10	BH144 10-12'	BH144 18-20'	BH144 2-4'	BH144 4-6'	BH144 6-8'	DUP A	BH145 10-12'METALS	BH145 10-12'PAH	BH145 14-16'	BH145 14-16'VOC	BH145 4-6'
						Start Depth	1.83	2.44	3.05	3.66	0.61	8.53	2.44	3.05	5.49	0.61	1.22	1.83	1.22	3.05	3.05	4.27	4.27	1.22
						End Depth	2.44	3.05	3.66	4.27	1.22	9.14	3.05	3.66	6.1	1.22	1.83	2.44	1.83	3.66	3.66	4.88	4.88	1.83
						Date	29 Sep 2008	29 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	22 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008	23 Sep 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																			
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	2-Butanone	µg/g	0.5	16	230	**0.03**		**10**		**0.03**						**5**						**3**	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	**0.03**		**10**		**0.03**						**5**						**3**	
VOC	Acetone	µg/g	0.5	16	16	**0.1**		**50**		**0.1**						**20**						**10**	
VOC	Benzene	µg/g	0.02	0.21	14	**0.005**		**4**		**0.05**	**0.02**			**0.02**	**0.4**	**0.4**	**0.02**				**0.02**	**0.2**	**0.1**
VOC	Bromodichloromethane	µg/g	0.05	13	50	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Bromoform	µg/g	0.05	0.27	21	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Bromomethane	µg/g	0.05	0.05	1.4	**0.003**		**2**		**0.003**						**0.6**						**0.3**	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Chloroform	µg/g	0.05	0.05	9.5	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																		
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	**0.003**		**2**		**0.003**						**0.6**						**0.3**	
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.004**		**47**		**0.01**	**0.02**			**0.99**	**0.4**	**0.4**	**0.02**				**0.16**	**3.4**	**5.6**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	n-Hexane	µg/g	0.05	2.8	54																		
VOC	Styrene	µg/g	0.05	0.7	66	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Toluene	µg/g	0.2	2.3	68	**0.02**		**1**		**0.02**	**0.02**			**0.02**	**0.4**	**0.4**	**0.02**				**0.02**	**0.2**	**0.12**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Trichlorofluoromethane	µg/g	0.25	4																			
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	**0.002**		**1**		**0.002**						**0.4**						**0.2**	
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.003**		**16**		**0.006**	**0.02**			**0.36**	**0.4**	**0.4**	**0.02**				**0.03**	**0.8**	**0.82**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.01**		**20**		**0.01**	**0.04**			**0.45**	**0.8**	**0.4**	**0.04**				**0.45**	**13**	**16**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.01**		**37**		**0.01**	**0.04**			**0.81**	**0.8**	**0.4**	**0.04**				**0.49**	**13**	**17**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH145	SLR BH145	SLR BH145	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH147	SLR BH147
					Sample ID	BH145 4-6'METALS	BH145 6-8'PAH	BH145 6-8'VOC	BH146 10-12'	BH146 10-12'-092408	BH146 12-14'	BH146 14-16'	BH146 16-18'	BH146 16-18'-092408	BH146 18-20'	BH146 18-20'-092408	BH146 2-4'	BH146 4-6'	BH146 6-8'	BH146 8-10'	BH 147 10-12'	BH 147 16-18'
					Start Depth	1.22	1.83	1.83	3.05	3.05	3.66	4.27	4.88	4.88	5.49	5.49	0.61	1.22	1.83	2.44	3.05	4.88
					End Depth	1.83	2.44	2.44	3.66	3.66	4.27	4.88	5.49	5.49	6.1	6.1	1.22	1.83	2.44	3.05	3.66	5.49
					Date	23 Sep 2008	23 Sep 2008	23 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	02 Oct 2008	02 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																
ABN	2,4-Dinitrophenol	µg/g	2	38	59																
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																
ABN	Phenol	µg/g	0.5	9.4	46																
CHEMISTRY	Ammonia	µg/g																			
CHEMISTRY	Bromide	µg/g																			
CHEMISTRY	Chlorite	µg/g																			
CHEMISTRY	Fluoride	µg/g	110 [c.]																		
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																		
CHEMISTRY	Moisture, percent	%				**16**	**12**	**18**	**9.5**	**46**	**16**	**59**	**28**	**14**	**11**	**12**	**28**	**18**	**11**	**17**	**16**	**14**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																		
CHEMISTRY	Nitrite (as N)	µg/g																			
Chemistry	ortho-Phosphate	µg/g																			
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.99**			**7.78**				**7.7**								
CHEMISTRY	Sulfate	µg/g																			
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																			
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																
GENCHEM	MOISTURE AT LIQUID LIMIT	%																			
INORGANIC	Aluminum	µg/g	26000 [c.]																		
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**			**0.2**				**0.2**								
INORGANIC	Arsenic	µg/g	18	18		**1**			**2.2**				**2.7**								
INORGANIC	Barium	µg/g	220	390		**9.3**			**15**				**22**								
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**			**0.2**				**0.2**								
INORGANIC	Boron	µg/g	36	120																	
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.05**			**0.18**				**0.18**								
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**			**0.1**				**0.1**								
INORGANIC	Calcium	µg/g	49000 [c.]																		
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																		
INORGANIC	Chromium	µg/g	70	160		**3.8**			**4.2**				**4.6**								
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**			**0.2**				**2**								
INORGANIC	Cobalt	µg/g	22	22		**2**			**2.1**				**2.2**								
INORGANIC	Copper	µg/g	92	140		**3**			**7.2**				**5.6**								
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**			**0.01**				**1**								
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.13**			**0.58**				**0.64**								
INORGANIC	Iron	µg/g	34000 [c.]																		
INORGANIC	Lead	µg/g	120	120		**3**			**12**				**15**								
INORGANIC	Magnesium	µg/g	15000 [c.]																		
INORGANIC	Manganese	µg/g	1400 [c.]																		
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**			**0.05**				**0.06**								
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**			**0.5**				**0.5**								
INORGANIC	Nickel	µg/g	82	100		**3.2**			**3.3**				**3.6**								
INORGANIC	Phosphorus	µg/g	1500 [c.]																		
INORGANIC	Potassium	µg/g	4900 [c.]																		
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**			**0.5**				**0.5**								
INORGANIC	Silver	µg/g	0.5	20		**0.2**			**0.2**				**0.2**								
INORGANIC	Sodium	µg/g	180 [c.]																		
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.54**			**0.2**				**0.19**								
INORGANIC	Strontium	µg/g	77 [c.]																		
INORGANIC	Thallium	µg/g	1	1		**0.05**			**0.05**				**0.05**								
INORGANIC	Titanium	µg/g	4700 [c.]																		
INORGANIC	Uranium (U)	µg/g	2.5	23																	
INORGANIC	Vanadium	µg/g	86	86		**6.6**			**6.9**				**6**								
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																
INORGANIC	Zinc	µg/g	290	340		**8.7**			**23**				**34**								
METAL	Zirconium	µg/g	48 [e.]																		

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH145	SLR BH145	SLR BH145	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH147	SLR BH147
						Sample ID	BH145 4-6'METALS	BH145 6-8'PAH	BH145 6-8'VOC	BH146 10-12'	BH146 10-12'-092408	BH146 12-14'	BH146 14-16'	BH146 16-18'	BH146 16-18'-092408	BH146 18-20'	BH146 18-20'-092408	BH146 2-4'	BH146 4-6'	BH146 6-8'	BH146 8-10'	BH 147 10-12'	BH 147 16-18'
						Start Depth	1.22	1.83	1.83	3.05	3.05	3.66	4.27	4.88	4.88	5.49	5.49	0.61	1.22	1.83	2.44	3.05	4.88
						End Depth	1.83	2.44	2.44	3.66	3.66	4.27	4.88	5.49	5.49	6.1	6.1	1.22	1.83	2.44	3.05	3.66	5.49
						Date	23 Sep 2008	23 Sep 2008	23 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	02 Oct 2008	02 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**1.2**					**0.02**								**1.6**		**6.2**	**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**1.3**					**0.005**								**0.1**		**0.05**	**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.06**					**0.04**								**6.3**		**0.15**	**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.01**					**0.01**								**0.91**		**0.005**	**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.12**					**0.09**								**6.4**		**0.11**	**0.01**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.07**					**0.12**								**4.3**		**0.1**	**0.01**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.06**					**0.16**								**3.4**		**0.07**	**0.01**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			**0.04**					**0.13**								**2.5**		**0.06**	**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.03**					**0.13**								**2.1**		**0.04**	**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.01**					**0.04**								**0.66**		**0.01**	**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.09**					**0.09**								**4**		**0.1**	**0.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.02**					**0.02**								**0.45**		**0.02**	**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.07**					**0.38**								**7.5**		**0.14**	**0.02**
PAH	Fluorene	µg/g	0.19	62	62		**0.13**					**0.04**								**9**		**0.21**	**0.0093**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.02**					**0.11**								**1.4**		**0.02**	**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.37**					**0.0075**								**2.4**		**0.26**	**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.66**					**0.11**								**1.6**		**0.61**	**0.05**
PAH	Pyrene	µg/g	1	78	2600		**0.3**					**0.42**								**14**		**0.28**	**0.03**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55					**23**	**36**	**30**		**10**		**10**		**21**	**17**	**2600**	**300**	**36**	
PHC	F1-BTEX	µg/g	25	55	55					**20**	**36**	**30**		**10**		**10**		**16**	**15**	**2600**	**300**	**36**	
PHC	F2 (C10-C16)	µg/g	10	98	230					**140**	**51**	**30**		**10**		**10**		**220**	**200**	**7300**	**1200**	**10**	
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300						**1100**	**79**	**74**		**10**		**10**		**2600**	**2000**	**13000**	**2000**	**10**	
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800						**360**	**10**	**30**		**10**		**10**		**1900**	**1300**	**5300**	**710**	**10**	
PHC	F4G-SG	µg/g	120	2800						**3400**								**11000**	**5200**	**15000**			
PHC	**Chrom. to baseline at nC5No**	None								**No**	Yes	Yes		Yes		Yes		**No**	**No**	**No**	Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			**0.1**							**0.002**					**38**		**2**	
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			**0.1**							**0.002**					**0.5**		**2**	
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			**0.3**							**0.002**					**0.4**		**2**	
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			**0.1**							**0.002**					**0.4**		**2**	
VOC	1,2-Dichloroethene (Total)	µg/g																					

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Port Lands, Toronto, ON

						Location	SLR BH145	SLR BH145	SLR BH145	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH146	SLR BH147	SLR BH147
						Sample ID	BH145 4-6'METALS	BH145 6-8'PAH	BH145 6-8'VOC	BH146 10-12'	BH146 10-12'-092408	BH146 12-14'	BH146 14-16'	BH146 16-18'	BH146 16-18'-092408	BH146 18-20'	BH146 18-20'-092408	BH146 2-4'	BH146 4-6'	BH146 6-8'	BH146 8-10'	BH 147 10-12'	BH 147 16-18'
						Start Depth	1.22	1.83	1.83	3.05	3.05	3.66	4.27	4.88	4.88	5.49	5.49	0.61	1.22	1.83	2.44	3.05	4.88
						End Depth	1.83	2.44	2.44	3.66	3.66	4.27	4.88	5.49	5.49	6.1	6.1	1.22	1.83	2.44	3.05	3.66	5.49
						Date	23 Sep 2008	23 Sep 2008	23 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	24 Sep 2008	02 Oct 2008	02 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																	
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			**0.1**							**0.002**				**0.4**		**2**	
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			**0.1**							**0.002**				**0.4**		**2**	
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																		
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			**0.1**							**0.002**				**0.4**		**2**	
VOC	2-Butanone	µg/g	0.5	16	230			**1**							**0.03**				**5**		**30**	
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			**1**							**0.03**				**5**		**30**	
VOC	Acetone	µg/g	0.5	16	16			**5**							**0.1**				**20**		**100**	
VOC	Benzene	µg/g	0.02	0.21	14			**0.1**		**1.9**	**0.02**	**0.06**		**0.02**	**0.005**	**0.02**	**0.48**	**0.16**	**2**	**0.25**	**2**	
VOC	Bromodichloromethane	µg/g	0.05	13	50			**0.1**							**0.002**				**0.4**		**2**	
VOC	Bromoform	µg/g	0.05	0.27	21			**0.1**							**0.002**				**0.4**		**2**	
VOC	Bromomethane	µg/g	0.05	0.05	1.4			**0.2**							**0.003**				**0.6**		**3**	
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			**0.1**							**0.002**				**0.4**		**2**	
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			**0.1**							**0.002**				**0.4**		**2**	
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			**0.1**							**0.002**				**0.4**		**2**	
VOC	Chloroform	µg/g	0.05	0.05	9.5			**0.1**							**0.002**				**0.4**		**2**	
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			**0.1**							**0.002**				**0.4**		**2**	
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				**0.1**							**0.002**				**0.4**		**2**	
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																	
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			**0.2**							**0.003**				**0.6**		**3**	
VOC	Ethylbenzene	µg/g	0.05	2	17			**1.2**		**0.11**	**0.13**	**0.17**		**0.02**	**0.006**	**0.02**	**0.21**	**0.23**	**8.6**	**0.89**	**7**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			**0.1**							**0.002**				**0.4**		**2**	
VOC	n-Hexane	µg/g	0.05	2.8	54																	
VOC	Styrene	µg/g	0.05	0.7	66			**0.1**							**0.002**				**0.4**		**2**	
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			**0.1**							**0.002**				**0.4**		**2**	
VOC	Toluene	µg/g	0.2	2.3	68			**0.1**		**0.37**	**0.02**	**0.06**		**0.02**	**0.01**	**0.02**	**1.3**	**0.52**	**0.4**	**0.04**	**2**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			**0.1**							**0.002**				**0.4**		**2**	
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				**0.1**							**0.002**				**0.4**		**2**	
VOC	Trichloroethylene	µg/g	0.05	0.061	300			**0.1**							**0.002**				**1.9**		**2**	
VOC	Trichlorofluoromethane	µg/g	0.25	4																		
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			**0.1**							**0.002**				**0.4**		**2**	
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.1**		**0.02**	**0.02**	**0.06**		**0.02**	**0.005**	**0.02**	**0.86**	**0.54**	**0.4**	**0.03**	**2**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**2.5**		**0.42**	**0.04**	**0.24**		**0.04**	**0.01**	**0.04**	**1.9**	**1.1**	**0.8**	**0.09**	**3**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**2.7**		**0.42**	**0.04**	**0.24**		**0.04**	**0.02**	**0.04**	**2.7**	**1.6**	**0.8**	**0.13**	**5**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH147	SLR BH147	SLR BH147	SLR BH148	SLR BH148	SLR BH148	SLR BH148	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150
					Sample ID	BH 147 2-4'	BH 147 4-6'	BH 147 6-8'	BH148 14-16'	BH148 6-8'	BH148 8-10'	DUP B	BH149 18-20'	BH149 2-4'	BH149 28-30'	BH149 4-6'	BH149 6-8'	BH 150 0-2'	BH 150 10-12'	BH 150 12-14'	BH 150 16-18'	BH 150 2-4'	BH 150 4-6'	BH 150 6-8'	BH 150 8-10'
					Start Depth	0.61	1.22	1.83	4.27	1.83	2.44	1.83	5.49	0.61	8.53	1.22	1.83	0	3.05	3.66	4.88	0.61	1.22	1.83	2.44
					End Depth	1.22	1.83	2.44	4.88	2.44	3.05	2.44	6.1	1.22	9.14	1.83	2.44	0.61	3.66	4.27	5.49	1.22	1.83	2.44	3.05
					Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**5.4**	**13**	**32**	**50**	**21**	**28**	**13**	**18**	**17**	**8.6**	**12**	**11**	**14**	**13**	**17**	**59**	**21**	**18**	**13**	**17**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**8.11**	**7.62**		**6.92**		**7.26**			**7.78**		**7.74**		**7.84**				**7.69**			
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**	**0.2**		**4**		**33**			**0.2**		**0.2**		**0.54**				**0.51**			
INORGANIC	Arsenic	µg/g	18	18		**1**	**1.1**		**25**		**15**			**2.6**		**1.2**		**6.3**				**6**			
INORGANIC	Barium	µg/g	220	390		**8.2**	**23**		**56**		**120**			**21**		**15**		**78**				**97**			
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**	**0.21**		**0.59**		**0.5**			**0.2**		**0.2**		**0.41**				**0.56**			
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.01**	**0.07**		**2.2**		**1.9**			**0.11**		**0.17**		**0.77**				**0.38**			
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**	**0.1**		**1.3**		**0.37**			**0.1**		**0.1**		**0.4**				**0.21**			
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**4.8**	**6**		**56**		**15**			**8.3**		**6.4**		**26**				**22**			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**1**		**2**		**0.4**			**0.2**		**0.2**		**0.2**				**0.2**			
INORGANIC	Cobalt	µg/g	22	22		**2.2**	**2.9**		**7**		**6.1**			**4.6**		**2.5**		**7.8**				**9.9**			
INORGANIC	Copper	µg/g	92	140		**3.6**	**6.1**		**360**		**100**			**76**		**6.6**		**31**				**28**			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**	**0.01**		**0.01**		**0.1**			**0.01**		**0.01**		**0.01**				**0.01**			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.07**	**0.19**		**2.5**		**0.9**			**0.17**		**0.19**		**2.2**				**2.7**			
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**8.1**	**4.1**		**1300**		**2000**			**19**		**6.1**		**50**				**30**			
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**	**0.05**		**3.9**		**0.53**			**0.3**		**0.07**		**0.07**				**0.06**			
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**	**0.5**		**4.7**		**3**			**0.5**		**0.5**		**0.63**				**0.5**			
INORGANIC	Nickel	µg/g	82	100		**3.4**	**5.9**		**16**		**16**			**9.6**		**4.6**		**16**				**22**			
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.5**		**0.91**		**0.8**			**0.5**		**0.5**		**0.5**				**0.5**			
INORGANIC	Silver	µg/g	0.5	20		**0.2**	**0.2**		**0.89**		**0.48**			**0.2**		**0.2**		**0.65**				**0.2**			
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.33**	**0.23**		**0.63**		**0.23**			**3.4**		**1.8**		**6**				**8.2**			
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		**0.06**	**0.05**		**0.15**		**0.16**			**0.05**		**0.05**		**0.11**				**0.13**			
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86		**12**	**9.8**		**25**		**25**			**14**		**16**		**22**				**28**			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340		**15**	**19**		**750**		**570**			**32**		**15**		**89**				**68**			
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH147	SLR BH147	SLR BH147	SLR BH148	SLR BH148	SLR BH148	SLR BH148	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150
					Sample ID	BH 147 2-4'	BH 147 4-6'	BH 147 6-8'	BH148 14-16'	BH148 6-8'	BH148 8-10'	DUP B	BH149 18-20'	BH149 2-4'	BH149 28-30'	BH149 4-6'	BH149 6-8'	BH 150 0-2'	BH 150 10-12'	BH 150 12-14'	BH 150 16-18'	BH 150 2-4'	BH 150 4-6'	BH 150 6-8'	BH 150 8-10'
					Start Depth	0.61	1.22	1.83	4.27	1.83	2.44	1.83	5.49	0.61	8.53	1.22	1.83	0	3.05	3.66	4.88	0.61	1.22	1.83	2.44
					End Depth	1.22	1.83	2.44	4.88	2.44	3.05	2.44	6.1	1.22	9.14	1.83	2.44	0.61	3.66	4.27	5.49	1.22	1.83	2.44	3.05
					Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**23**	**42**		**3**	**8.9**		**390**		**40**			**0.82**					**17**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.56**	**1**		**4.7**	**12**		**500**		**56**			**0.52**					**25**
PAH	Acenaphthene	µg/g	0.072	7.9	560				**71**	**3.7**		**0.26**	**11**		**300**		**1.7**			**0.02**					**0.38**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**8.5**	**0.01**		**0.16**	**0.72**		**50**		**0.1**			**0.005**					**0.02**
PAH	Anthracene	µg/g	0.22	0.67	0.67				**49**	**1.4**		**0.51**	**5.6**		**140**		**0.55**			**0.01**					**0.25**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**32**	**0.34**		**0.4**	**3.1**		**82**		**0.2**			**0.01**					**0.09**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**24**	**0.22**		**0.3**	**2.3**		**60**		**0.1**			**0.005**					**0.02**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**17**	**0.23**		**0.4**	**1.7**		**44**		**0.2**			**0.01**					**0.05**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**8.4**	**0.14**		**0.19**	**0.89**		**22**		**0.4**			**0.02**					**0.08**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**6.4**	**0.05**		**0.12**	**0.55**		**15**		**0.2**			**0.01**					**0.04**
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**25**	**0.39**		**0.32**	**2.4**		**64**		**0.25**			**0.01**					**0.2**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**2.4**	**0.04**		**0.04**	**0.23**		**5.5**		**0.4**			**0.02**					**0.08**
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**55**	**0.65**		**1.4**	**5.8**		**140**		**0.27**			**0.01**					**0.15**
PAH	Fluorene	µg/g	0.19	62	62				**33**	**4.1**		**0.56**	**4.3**		**150**		**2.6**			**0.05**					**1.1**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**8**	**0.08**		**0.17**	**0.79**		**20**		**0.4**			**0.02**					**0.08**
PAH	Naphthalene	µg/g	0.09	0.6	200				**1.3**	**2.6**		**8.7**	**14**		**1200**		**32**			**0.38**					**23**
PAH	Phenanthrene	µg/g	0.69	6.2	270				**110**	**5.6**		**2**	**19**		**500**		**4.7**			**0.13**					**2.7**
PAH	Pyrene	µg/g	1	78	2600				**74**	**1.5**		**1.3**	**7.6**		**190**		**0.71**			**0.01**					**0.28**
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35																					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55			**830**		**2800**	**1400**				**650**	**1800**			**10**		**30**		**1200**	**3400**	
PHC	F1-BTEX	µg/g	25	55	55			**830**		**2800**	**1400**				**380**	**1800**			**10**		**30**		**1200**	**3300**	
PHC	F2 (C10-C16)	µg/g	10	98	230			**2800**		**4600**	**2300**				**13000**	**3400**			**16**		**34**		**2800**	**3700**	
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300				**1300**		**2700**	**1300**				**15000**	**4000**			**10**		**83**		**2300**	**2900**	
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800				**410**		**530**	**250**				**1200**	**1000**			**10**		**30**		**540**	**670**	
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None						Yes		Yes	Yes				Yes	Yes			Yes		Yes		Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180					**0.4**			**0.1**		**10**		**1**								**2**
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH147	SLR BH147	SLR BH147	SLR BH148	SLR BH148	SLR BH148	SLR BH148	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH149	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150	SLR BH150
					Sample ID	BH 147 2-4'	BH 147 4-6'	BH 147 6-8'	BH148 14-16'	BH148 6-8'	BH148 8-10'	DUP B	BH149 18-20'	BH149 2-4'	BH149 28-30'	BH149 4-6'	BH149 6-8'	BH 150 0-2'	BH 150 10-12'	BH 150 12-14'	BH 150 16-18'	BH 150 2-4'	BH 150 4-6'	BH 150 6-8'	BH 150 8-10'
					Start Depth	0.61	1.22	1.83	4.27	1.83	2.44	1.83	5.49	0.61	8.53	1.22	1.83	0	3.05	3.66	4.88	0.61	1.22	1.83	2.44
					End Depth	1.22	1.83	2.44	4.88	2.44	3.05	2.44	6.1	1.22	9.14	1.83	2.44	0.61	3.66	4.27	5.49	1.22	1.83	2.44	3.05
					Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	26 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76					**0.4**			**0.1**		**10**		**1**							**2**
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59					**0.4**			**0.1**		**10**		**1**							**2**
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59					**0.4**			**0.1**		**10**		**1**							**2**
VOC	2-Butanone	µg/g	0.5	16	230					**5**			**1**		**100**		**10**							**30**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150					**5**			**1**		**100**		**10**							**30**
VOC	Acetone	µg/g	0.5	16	16					**20**			**5**		**500**		**50**							**100**
VOC	Benzene	µg/g	0.02	0.21	14			**0.2**		**0.4**	**0.2**		**0.1**		**26**	**0.89**	**1**		**0.02**		**0.06**		**0.2**	**0.2**	**2**
VOC	Bromodichloromethane	µg/g	0.05	13	50					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Bromoform	µg/g	0.05	0.27	21					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Bromomethane	µg/g	0.05	0.05	1.4					**0.6**			**0.2**		**20**		**2**							**3**
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Chloroform	µg/g	0.05	0.05	9.5					**0.4**			**0.1**		**10**		**1**							**2**
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130					**0.4**			**0.1**		**10**		**1**							**2**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05						**0.4**			**0.1**		**10**		**1**							**2**
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4					**0.6**			**0.2**		**20**		**2**							**3**
VOC	Ethylbenzene	µg/g	0.05	2	17			**2.4**		**7.7**	**2.9**		**1**		**180**	**9.1**	**12**		**0.02**		**0.15**		**4.9**	**17**	**20**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220					**0.4**			**0.1**		**10**		**1**							**2**
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Toluene	µg/g	0.2	2.3	68			**0.2**		**0.4**	**0.43**		**0.1**		**78**	**1.7**	**1**		**0.02**		**0.06**		**0.49**	**2.1**	**3**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220					**0.4**			**0.1**		**10**		**1**							**2**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05						**0.4**			**0.1**		**10**		**1**							**2**
VOC	Trichloroethylene	µg/g	0.05	0.061	300					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270					**0.4**			**0.1**		**10**		**1**							**2**
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.73**		**0.5**	**0.2**		**0.4**		**73**	**2.4**	**3**		**0.02**		**0.06**		**3.7**	**9.3**	**6**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.91**		**1.8**	**1.6**		**0.2**		**130**	**22**	**28**		**0.04**		**0.52**		**18**	**68**	**85**
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**1.6**		**2.2**	**1.6**		**0.6**		**210**	**24**	**30**		**0.04**		**0.52**		**22**	**77**	**91**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH153	SLR BH153	SLR BH153	SLR BH153	SLR BH153
					Sample ID	BH 151 0-2'	BH 151 10-12'	BH 151 10-12'-121508	BH 151 12-14'	BH 151 14-16'	BH 151 2-4'	BH 151 4-6'	BH 151 6-8'	BH 151 8-10'	BH 152 10-12'	BH 152 12-14'	BH 152 16-18'	BH 152 2-4'	BH 152 4-6'	BH153 12-14'	BH153 16-18'	BH153 22-24'	BH153 24-26'	BH153 26-28'
					Start Depth	0	3.05	3.05	3.66	4.27	0.61	1.22	1.83	2.44	3.05	3.66	4.88	0.61	1.22	3.66	4.88	6.71	7.32	7.92
					End Depth	0.61	3.66	3.66	4.27	4.88	1.22	1.83	2.44	3.05	3.66	4.27	5.49	1.22	1.83	4.27	5.49	7.32	7.92	8.53
					Date	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**15**	**13**	**13**	**15**	**15**	**11**	**14**	**30**	**8.9**	**35**	**17**	**18**	**5**	**16**	**15**	**66**	**18**	**16**	**10**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.4**					**8**							**7.83**	**8.12**	**7.79**				
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**					**0.2**							**0.2**	**0.2**	**0.2**				
INORGANIC	Arsenic	µg/g	18	18		**1.7**					**1**							**1.7**	**1**	**1**				
INORGANIC	Barium	µg/g	220	390		**34**					**4.9**							**14**	**7.1**	**6.6**				
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**					**0.2**							**0.2**	**0.2**	**0.2**				
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.38**					**0.09**							**0.6**	**0.01**	**0.05**				
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**					**0.1**							**0.1**	**0.1**	**0.1**				
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**6.5**					**3.5**							**3.7**	**3.9**	**2.6**				
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**2**					**0.4**							**0.2**	**0.2**	**0.2**				
INORGANIC	Cobalt	µg/g	22	22		**2.7**					**1.6**							**1.9**	**1.5**	**1.3**				
INORGANIC	Copper	µg/g	92	140		**44**					**5.1**							**5.3**	**2.2**	**3.5**				
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**					**0.01**							**0.01**	**0.01**	**0.1**				
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.1**					**0.12**							**0.25**	**0.19**	**0.13**				
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**7.3**					**2.1**							**16**	**2.5**	**4**				
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**					**0.05**							**0.05**	**0.05**	**0.05**				
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**					**0.5**							**0.5**	**0.5**	**0.5**				
INORGANIC	Nickel	µg/g	82	100		**5.5**					**3.4**							**4.1**	**2.7**	**1.9**				
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**					**0.5**							**0.5**	**0.5**	**0.5**				
INORGANIC	Silver	µg/g	0.5	20		**0.2**					**0.2**							**0.2**	**0.2**	**0.2**				
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.5**					**0.26**							**5.4**	**0.43**	**0.68**				
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.05**					**0.05**							**0.05**	**0.05**	**0.05**				
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**9.2**					**7.4**							**8.7**	**9**	**6.4**				
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**21**					**12**							**20**	**8.3**	**6.3**				
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH153	SLR BH153	SLR BH153	SLR BH153	SLR BH153
						Sample ID	BH 151 0-2'	BH 151 10-12'	BH 151 10-12'-121508	BH 151 12-14'	BH 151 14-16'	BH 151 2-4'	BH 151 4-6'	BH 151 6-8'	BH 151 8-10'	BH 152 10-12'	BH 152 12-14'	BH 152 16-18'	BH 152 2-4'	BH 152 4-6'	BH153 12-14'	BH153 16-18'	BH153 22-24'	BH153 24-26'	BH153 26-28'
						Start Depth	0	3.05	3.05	3.66	4.27	0.61	1.22	1.83	2.44	3.05	3.66	4.88	0.61	1.22	3.66	4.88	6.71	7.32	7.92
						End Depth	0.61	3.66	3.66	4.27	4.88	1.22	1.83	2.44	3.05	3.66	4.27	5.49	1.22	1.83	4.27	5.49	7.32	7.92	8.53
						Date	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**0.01**			**0.06**				**0.17**				**0.12**					**0.92**		
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**			**0.01**				**0.005**				**0.08**					**1.4**		
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.01**			**0.07**				**0.01**				**0.5**					**0.76**		
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.005**			**0.01**				**0.005**				**0.04**					**0.0062**		
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.005**			**0.01**				**0.005**				**0.36**					**0.07**		
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.01**			**0.02**				**0.01**				**0.23**					**0.01**		
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.0053**			**0.01**				**0.005**				**0.18**					**0.005**		
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			**0.01**			**0.02**				**0.01**				**0.17**					**0.01**		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.02**			**0.04**				**0.02**				**0.07**					**0.02**		
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.01**			**0.02**				**0.01**				**0.05**					**0.01**		
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.01**			**0.02**				**0.01**				**0.18**					**0.01**		
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.02**			**0.04**				**0.02**				**0.02**					**0.02**		
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.0084**			**0.02**				**0.01**				**0.74**					**0.01**		
PAH	Fluorene	µg/g	0.19	62	62		**0.005**			**0.03**				**0.01**				**0.51**					**0.21**		
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.02**			**0.04**				**0.02**				**0.07**					**0.02**		
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.0063**			**0.02**				**0.03**				**0.02**					**2.7**		
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.0071**			**0.04**				**0.01**				**1.4**					**0.33**		
PAH	Pyrene	µg/g	1	78	2600		**0.01**			**0.03**				**0.01**				**0.69**					**0.02**		
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35																					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55				**30**			**2600**			**18**	**10**	**10**	**10**					**10**	**2600**	
PHC	F1-BTEX	µg/g	25	55	55				**30**			**2600**			**18**	**10**	**10**	**10**					**10**	**1700**	
PHC	F2 (C10-C16)	µg/g	10	98	230				**31**			**2800**			**10**	**10**	**10**	**10**					**340**	**14000**	
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300					**25**			**1400**			**10**	**60**	**10**	**170**					**300**	**15000**	
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800					**10**			**390**			**10**	**10**	**10**	**10**					**10**	**1200**	
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None							Yes			Yes			Yes	Yes	Yes	Yes					Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			**0.002**					**0.5**									**4**			
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			**0.002**					**0.5**									**4**			
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			**0.002**					**0.5**									**4**			
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			**0.002**					**0.5**									**4**			
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			**0.002**					**0.5**									**4**			
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			**0.002**					**0.5**									**4**			
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			**0.002**					**0.5**									**4**			
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			**0.002**					**0.5**									**4**			
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			**0.002**					**0.5**									**4**			
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH151	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH152	SLR BH153	SLR BH153	SLR BH153	SLR BH153	SLR BH153
						Sample ID	BH 151 0-2'	BH 151 10-12'	BH 151 10-12'-121508	BH 151 12-14'	BH 151 14-16'	BH 151 2-4'	BH 151 4-6'	BH 151 6-8'	BH 151 8-10'	BH 152 10-12'	BH 152 12-14'	BH 152 16-18'	BH 152 2-4'	BH 152 4-6'	BH153 12-14'	BH153 16-18'	BH153 22-24'	BH153 24-26'	BH153 26-28'
						Start Depth	0	3.05	3.05	3.66	4.27	0.61	1.22	1.83	2.44	3.05	3.66	4.88	0.61	1.22	3.66	4.88	6.71	7.32	7.92
						End Depth	0.61	3.66	3.66	4.27	4.88	1.22	1.83	2.44	3.05	3.66	4.27	5.49	1.22	1.83	4.27	5.49	7.32	7.92	8.53
						Date	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			**0.002**					**0.5**								**4**			
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			**0.002**					**0.5**								**4**			
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			**0.002**					**0.5**								**4**			
VOC	2-Butanone	µg/g	0.5	16	230			**0.03**					**6**								**50**			
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			**0.03**					**6**								**50**			
VOC	Acetone	µg/g	0.5	16	16			**0.1**					**30**								**200**			
VOC	Benzene	µg/g	0.02	0.21	14			**0.004**	**0.02**			**0.4**	**0.5**	**0.02**	**0.02**	**0.02**	**0.02**				**4**		**0.17**	**33**
VOC	Bromodichloromethane	µg/g	0.05	13	50			**0.002**					**0.5**								**4**			
VOC	Bromoform	µg/g	0.05	0.27	21			**0.002**					**0.5**								**4**			
VOC	Bromomethane	µg/g	0.05	0.05	1.4			**0.003**					**0.8**								**6**			
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			**0.002**					**0.5**								**4**			
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			**0.002**					**0.5**								**4**			
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			**0.002**					**0.5**								**4**			
VOC	Chloroform	µg/g	0.05	0.05	9.5			**0.002**					**0.5**								**4**			
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			**0.002**					**0.5**								**4**			
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**					**0.5**								**4**			
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			**0.003**					**0.8**								**6**			
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.005**	**0.02**			**5.3**	**1.6**	**0.02**	**0.02**	**0.02**	**0.02**				**66**		**2.1**	**350**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			**0.002**					**0.5**								**4**			
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66			**0.002**					**0.5**								**4**			
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			**0.002**					**0.5**								**4**			
VOC	Toluene	µg/g	0.2	2.3	68			**0.01**	**0.02**			**0.4**	**0.5**	**0.02**	**0.02**	**0.02**	**0.02**				**4**		**0.04**	**100**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			**0.002**					**0.5**								**4**			
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**					**0.5**								**4**			
VOC	Trichloroethylene	µg/g	0.05	0.061	300			**0.002**					**0.5**								**4**			
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			**0.002**					**0.5**								**4**			
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.005**	**0.02**			**0.4**	**0.5**	**0.02**	**0.02**	**0.02**	**0.02**				**27**		**0.82**	**130**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.02**	**0.04**			**0.8**	**0.5**	**0.04**	**0.04**	**0.04**	**0.04**				**46**		**1.2**	**270**
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.02**	**0.04**			**0.8**	**0.5**	**0.04**	**0.04**	**0.04**	**0.04**				**73**		**2**	**400**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH153	SLR BH153	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156
					Sample ID	BH153 6-8'	BH153 8-10'	BH 154 12-14'	BH 154 14-16'	BH 154 16-18'	BH 154 4-6'	BH 154 6-8'	BH155 16-18'	BH155 18-20'	BH155 2-4'	BH155 24-26'	BH155 4-6'	BH155 6-8'	BH156 0-2'	BH156 16-18'	BH156 20-22'	BH156 22-24'	BH156 2-4'	BH156 4-6'	BH156 6-8'
					Start Depth	1.83	2.44	3.66	4.27	4.88	1.22	1.83	4.88	5.49	0.61	7.32	1.22	1.83	0	4.88	6.1	6.71	0.61	1.22	1.83
					End Depth	2.44	3.05	4.27	4.88	5.49	1.83	2.44	5.49	6.1	1.22	7.92	1.83	2.44	0.61	5.49	6.71	7.32	1.22	1.83	2.44
					Date	01 Oct 2008	01 Oct 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																			
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																			
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																			
ABN	2,4-Dinitrophenol	µg/g	2	38	59																			
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																			
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																			
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																			
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																			
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																			
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																			
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																			
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																			
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																			
ABN	Phenol	µg/g	0.5	9.4	46																			
CHEMISTRY	Ammonia	µg/g																						
CHEMISTRY	Bromide	µg/g																						
CHEMISTRY	Chlorite	µg/g																						
CHEMISTRY	Fluoride	µg/g	110 [c.]																					
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																					
CHEMISTRY	Moisture, percent	%				**17**	**21**	**20**	**21**	**26**	**15**	**17**	**20**	**18**	**73**	**13**	**18**	**21**	**31**	**15**	**48**	**25**	**17**	**13**	**17**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																					
CHEMISTRY	Nitrite (as N)	µg/g																						
Chemistry	ortho-Phosphate	µg/g																						
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.85**		**7.69**				**8.05**			**7.03**		**7.82**		**7.49**				**7.64**		
CHEMISTRY	Sulfate	µg/g																						
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																						
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																			
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																			
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																			
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																			
GENCHEM	MOISTURE AT LIQUID LIMIT	%																						
INORGANIC	Aluminum	µg/g	26000 [c.]																					
INORGANIC	Antimony	µg/g	1.3	7.5		**0.2**		**0.2**				**0.2**			**0.2**		**0.2**		**5.5**				**1.1**		
INORGANIC	Arsenic	µg/g	18	18		**1**		**1**				**1**			**1.1**		**1**		**8.3**				**3.8**		
INORGANIC	Barium	µg/g	220	390		**6.7**		**12**				**12**			**18**		**17**		**130**				**15**		
INORGANIC	Beryllium	µg/g	2.5	4		**0.2**		**0.2**				**0.2**			**0.2**		**0.2**		**0.29**				**0.2**		
INORGANIC	Boron	µg/g	36	120																				
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.02**		**0.07**				**0.08**			**0.23**		**0.11**		**0.82**				**0.39**		
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.1**		**0.1**				**0.1**			**0.1**		**0.1**		**1.4**				**0.46**		
INORGANIC	Calcium	µg/g	49000 [c.]																					
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																					
INORGANIC	Chromium	µg/g	70	160		**3.5**		**4.7**				**4.4**			**4.9**		**3.5**		**44**				**13**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**		**0.2**				**0.4**			**1**		**1**		**1**				**1**		
INORGANIC	Cobalt	µg/g	22	22		**1.5**		**1.6**				**1.7**			**1.8**		**2.1**		**4.6**				**1.6**		
INORGANIC	Copper	µg/g	92	140		**1.7**		**2.3**				**2.9**			**5**		**3.2**		**40**				**12**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**		**0.01**				**0.01**			**0.1**		**0.1**		**0.01**						
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.13**		**0.18**				**0.2**			**0.48**		**0.17**		**0.28**				**0.13**		
INORGANIC	Iron	µg/g	34000 [c.]																					
INORGANIC	Lead	µg/g	120	120		**1.5**		**2.3**				**2.1**			**5.7**		**2.3**		**840**				**87**		
INORGANIC	Magnesium	µg/g	15000 [c.]																					
INORGANIC	Manganese	µg/g	1400 [c.]																					
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.05**		**0.05**				**0.05**			**0.05**		**0.05**		**2.4**				**2.2**		
INORGANIC	Molybdenum	µg/g	2	6.9		**0.5**		**0.5**				**0.5**			**0.5**		**0.5**		**2.7**				**0.88**		
INORGANIC	Nickel	µg/g	82	100		**2.3**		**2.9**				**2.7**			**4**		**3.2**		**22**				**8.4**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																					
INORGANIC	Potassium	µg/g	4900 [c.]																					
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**		**0.5**				**0.5**			**0.5**		**0.5**		**0.5**				**0.5**		
INORGANIC	Silver	µg/g	0.5	20		**0.2**		**0.2**				**0.2**			**0.2**		**0.2**		**0.43**				**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																					
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1**		**1.5**				**2**			**0.74**		**0.26**		**2.2**				**0.39**		
INORGANIC	Strontium	µg/g	77 [c.]																					
INORGANIC	Thallium	µg/g	1	1		**0.05**		**0.05**				**0.05**			**0.05**		**0.05**		**0.24**				**0.06**		
INORGANIC	Titanium	µg/g	4700 [c.]																					
INORGANIC	Uranium (U)	µg/g	2.5	23																				
INORGANIC	Vanadium	µg/g	86	86		**7**		**9**				**8.8**			**6.5**		**7.4**		**28**				**31**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																			
INORGANIC	Zinc	µg/g	290	340		**7.3**		**12**				**12**			**12**		**11**		**180**				**42**		
METAL	Zirconium	µg/g	48 [e.]																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH153	SLR BH153	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156
					Sample ID	BH153 6-8'	BH153 8-10'	BH 154 12-14'	BH 154 14-16'	BH 154 16-18'	BH 154 4-6'	BH 154 6-8'	BH155 16-18'	BH155 18-20'	BH155 2-4'	BH155 24-26'	BH155 4-6'	BH155 6-8'	BH156 0-2'	BH156 16-18'	BH156 20-22'	BH156 22-24'	BH156 2-4'	BH156 4-6'	BH156 6-8'
					Start Depth	1.83	2.44	3.66	4.27	4.88	1.22	1.83	4.88	5.49	0.61	7.32	1.22	1.83	0	4.88	6.1	6.71	0.61	1.22	1.83
					End Depth	2.44	3.05	4.27	4.88	5.49	1.83	2.44	5.49	6.1	1.22	7.92	1.83	2.44	0.61	5.49	6.71	7.32	1.22	1.83	2.44
					Date	01 Oct 2008	01 Oct 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																			
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																			
OCP	Hexachloroethane	µg/g	0.01	0.089	22																			
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																						
other SVOC	2-Chloronaphthalene	µg/g																						
other SVOC	2-Hexanone	µg/g																						
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																						
other SVOC	4-Chlorophenyl Phenylether	µg/g																						
other SVOC	Bis (2-chloroethoxy) methane	µg/g																						
other SVOC	Butyl benzyl phthalate	µg/g																						
other SVOC	Chloroethane	µg/g																						
other SVOC	Chloromethane	µg/g																						
other SVOC	Di-N-Butylphthalate	µg/g																						
other SVOC	Di-n-octyl phthalate	µg/g																						
other SVOC	Isophorone	µg/g																						
other SVOC	Nitrobenzene	µg/g																						
other SVOC	N-Nitrosodi-N-propylamine	µg/g																						
other SVOC	N-Nitrosodiphenylamine	µg/g																						
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																			
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**		**0.02**		**0.7**					**150**		**0.0098**			**0.01**	**0.01**			
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76		**0.005**		**0.005**		**0.005**					**200**		**0.0072**			**0.01**	**0.01**			
PAH	Acenaphthene	µg/g	0.072	7.9	560		**0.01**		**0.01**		**0.26**					**130**		**0.03**			**0.02**	**0.02**			
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15		**0.005**		**0.005**		**0.09**					**20**		**0.0064**			**0.01**	**0.01**			
PAH	Anthracene	µg/g	0.22	0.67	0.67		**0.005**		**0.0072**		**0.005**					**75**		**0.01**			**0.01**	**0.01**			
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11		**0.01**		**0.01**		**0.02**					**38**		**0.03**			**0.02**	**0.02**			
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13		**0.005**		**0.0071**		**0.01**					**28**		**0.01**			**0.03**	**0.01**			
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			**0.01**		**0.01**		**0.01**					**21**		**0.01**			**0.03**	**0.02**			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																			
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13		**0.02**		**0.02**		**0.02**					**11**		**0.02**			**0.04**	**0.04**			
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13		**0.01**		**0.01**		**0.01**					**7.1**		**0.01**			**0.02**	**0.02**			
PAH	Chrysene	µg/g	2.8	7	3.6E+11		**0.01**		**0.01**		**0.03**					**29**		**0.02**			**0.02**	**0.02**			
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13		**0.02**		**0.02**		**0.02**					**2.6**		**0.02**			**0.04**	**0.04**			
PAH	Fluoranthene	µg/g	0.69	0.69	40000		**0.005**		**0.02**		**0.09**					**74**		**0.07**			**0.05**	**0.01**			
PAH	Fluorene	µg/g	0.19	62	62		**0.005**		**0.01**		**0.47**					**67**		**0.02**			**0.01**	**0.01**			
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13		**0.02**		**0.02**		**0.02**					**9.6**		**0.02**			**0.04**	**0.04**			
PAH	Naphthalene	µg/g	0.09	0.6	200		**0.005**		**0.005**		**0.08**					**510**		**0.0062**			**0.01**	**0.01**			
PAH	Phenanthrene	µg/g	0.69	6.2	270		**0.005**		**0.01**		**0.06**					**220**		**0.02**			**0.03**	**0.01**			
PAH	Pyrene	µg/g	1	78	2600		**0.005**		**0.02**		**0.08**					**85**		**0.08**			**0.06**	**0.01**			
PCB	Aroclor 1016	µg/g																						
PCB	Aroclor 1221	µg/g																						
PCB	Aroclor 1232	µg/g																						
PCB	Aroclor 1242	µg/g																						
PCB	Aroclor 1248	µg/g																						
PCB	Aroclor 1254	µg/g																						
PCB	Aroclor 1260	µg/g																						
PCB	Aroclor 1262	µg/g																						
PCB	Aroclor 1268	µg/g																						
PCB	PCB, Total	µg/g	0.3	0.35																				
Perchlorate	Perchlorate	µg/g																						
PHC	F1 (C6-C10)	µg/g	25	55	55					**10**		**10**	**10**	**10**						**10**			**190**	**10**
PHC	F1-BTEX	µg/g	25	55	55					**10**		**10**	**10**	**10**						**10**			**190**	**10**
PHC	F2 (C10-C16)	µg/g	10	98	230					**250**		**27**	**10**	**10**						**10**			**160**	**10**
PHC	F2-Naphth	µg/g	10	98	230																			
PHC	F3 (C16-C34)	µg/g	240	300						**930**		**140**	**130**	**39**						**14**			**390**	**10**
PHC	F3-PAH	µg/g	240	300																				
PHC	F4 (C34-C50)	µg/g	120	2800						**120**		**10**	**45**	**10**						**10**			**120**	**10**
PHC	F4G-SG	µg/g	120	2800																				
PHC	**Chrom. to baseline at nC5No**	None								Yes		Yes	Yes	Yes						Yes			Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g																						
SVOC	Hexachlorocyclopentadiene	µg/g																						
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,2-Dichloroethene (Total)	µg/g																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH153	SLR BH153	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH154	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH155	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156	SLR BH156
						Sample ID	BH153 6-8'	BH153 8-10'	BH 154 12-14'	BH 154 14-16'	BH 154 16-18'	BH 154 4-6'	BH 154 6-8'	BH155 16-18'	BH155 18-20'	BH155 2-4'	BH155 24-26'	BH155 4-6'	BH155 6-8'	BH156 0-2'	BH156 16-18'	BH156 20-22'	BH156 22-24'	BH156 2-4'	BH156 4-6'	BH156 6-8'
						Start Depth	1.83	2.44	3.66	4.27	4.88	1.22	1.83	4.88	5.49	0.61	7.32	1.22	1.83	0	4.88	6.1	6.71	0.61	1.22	1.83
						End Depth	2.44	3.05	4.27	4.88	5.49	1.83	2.44	5.49	6.1	1.22	7.92	1.83	2.44	0.61	5.49	6.71	7.32	1.22	1.83	2.44
						Date	01 Oct 2008	01 Oct 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	29 Sep 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	01 Oct 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008	15 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																					
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	2-Butanone	µg/g	0.5	16	230			**0.03**			**3**			**0.03**		**60**					**0.03**				
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150			**0.03**			**3**			**0.03**		**60**					**0.03**				
VOC	Acetone	µg/g	0.5	16	16			**0.1**			**10**			**0.1**		**300**					**0.3**				
VOC	Benzene	µg/g	0.02	0.21	14			**0.005**		**0.02**	**0.2**	**0.02**	**0.02**	**0.01**		**8**				**0.02**	**0.01**			**0.02**	**0.02**
VOC	Bromodichloromethane	µg/g	0.05	13	50			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Bromoform	µg/g	0.05	0.27	21			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Bromomethane	µg/g	0.05	0.05	1.4			**0.003**			**0.3**			**0.003**		**8**					**0.003**				
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48			**0.002**			**0.2**			**0.002**		5					**0.002**				
VOC	Chloroform	µg/g	0.05	0.05	9.5			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130			**0.002**			**0.2**			**0.02**		**5**					**0.002**				
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																				
VOC	Dichloromethane	µg/g	0.05	0.1	7.4			**0.003**			**0.3**			**0.003**		**8**					**0.02**				
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.004**		**0.02**	**0.2**	**0.02**	**0.02**	**0.01**		**86**				**0.02**	**0.003**			**0.02**	**0.02**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	n-Hexane	µg/g	0.05	2.8	54																				
VOC	Styrene	µg/g	0.05	0.7	66			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Tetrachloroethene	µg/g	0.05	0.28	18			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Toluene	µg/g	0.2	2.3	68			**0.01**		**0.02**	**0.2**	**0.02**	**0.02**	**0.02**		**26**				**0.02**	**0.01**			**0.02**	**0.02**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05				**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Trichloroethylene	µg/g	0.05	0.061	300			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Trichlorofluoromethane	µg/g	0.25	4																					
VOC	Vinyl Chloride	µg/g	0.02	0.02	270			**0.002**			**0.2**			**0.002**		**5**					**0.002**				
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.004**		**0.02**	**0.2**	**0.02**	**0.02**	**0.008**		**34**				**0.02**	**0.004**			**0.02**	**0.02**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.01**		**0.04**	**0.2**	**0.04**	**0.04**	**0.02**		**65**				**0.04**	**0.01**			**0.04**	**0.04**
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.02**		**0.04**	**0.2**	**0.04**	**0.04**	**0.03**		**99**				**0.04**	**0.02**			**0.04**	**0.04**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH157	SLR BH157	SLR BH157	SLR BH157	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH161	SLR BH161	SLR BH161	SLR BH161
					Sample ID	BH 157 14-16'	BH 157 16-18'	BH 157 2-4'	BH 157 4-6'	BH158 0-2'	BH158 10-12'	BH158 14-16'	BH158 22-24'	BH158 4-6'	BH 159 0-2'	BH 159 10-12'	BH 159 12-14'	BH 159 14-16'	BH 159 2-4'	BH 159 8-10'	BH 161 0-2'	BH 161 10-12'	BH 161 12-14'	BH 161 14-16'
					Start Depth	4.27	4.88	0.61	1.22	0	3.05	4.27	6.71	1.22	0	3.05	3.66	4.27	0.61	2.44	0	3.05	3.66	4.27
					End Depth	4.88	5.49	1.22	1.83	0.61	3.66	4.88	7.32	1.83	0.61	3.66	4.27	4.88	1.22	3.05	0.61	3.66	4.27	4.88
					Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**17**	**19**	**11**	**26**	**2**	**26**	**55**	**15**	**15**	**15**	**42**	**26**	**26**	**1.2**	**48**	**12**	**15**	**16**	**16**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]					**7.87**	**7.62**	**8.13**					**7.43**	**8.01**				**9.5**		**7.69**			
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5				**0.2**	**0.2**	**0.2**				**0.2**	**0.25**				**0.2**		**0.98**		
INORGANIC	Arsenic	µg/g	18	18				**1**	**1.1**	**2.7**				**1.1**	**3.5**				**2.1**		**15**		
INORGANIC	Barium	µg/g	220	390				**8.3**	**24**	**20**				**21**	**120**				**30**		**200**		
INORGANIC	Beryllium	µg/g	2.5	4				**0.2**	**0.2**	**0.2**				**0.2**	**0.43**				**0.2**		**0.8**		
INORGANIC	Boron	µg/g	36	120																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5				**0.02**	**0.15**	**0.12**				**0.31**	**0.81**				**0.08**		**1.1**		
INORGANIC	Cadmium	µg/g	1.2	1.2				**0.1**	**0.1**	**0.15**				**0.1**	**0.17**				**0.1**		**0.55**		
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160				**2.9**	**5.4**	**8.9**				**6.9**	**13**				**12**		**13**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8				**0.2**	**0.2**	**0.2**				**0.2**	**0.2**				**0.2**		**0.2**		
INORGANIC	Cobalt	µg/g	22	22				**1.5**	**3**	**3.6**				**3.3**	**4**				**3.3**		**4.6**		
INORGANIC	Copper	µg/g	92	140				**2.3**	**4.5**	**14**				**5.6**	**13**				**10**		**35**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02			**0.01**	**0.01**	**0.01**				**0.1**	**0.01**				**0.01**		**0.01**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7				**0.19**	**0.35**	**0.43**				**0.26**	**0.74**				**0.51**		**0.42**		
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120				**2.3**	**6**	**33**				**5.9**	**170**				**23**		**560**		
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14			**0.05**	**0.05**	**0.05**				**0.05**	**0.08**				**0.05**		**0.86**		
INORGANIC	Molybdenum	µg/g	2	6.9				**0.5**	**0.5**	**0.97**				**0.5**	**0.5**				**0.78**		**2.7**		
INORGANIC	Nickel	µg/g	82	100				**2.5**	**5.5**	**9.1**				**5.8**	**8.7**				**10**		**14**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4				**0.5**	**0.5**	**0.5**				**0.5**	**0.5**				**0.5**		**0.5**		
INORGANIC	Silver	µg/g	0.5	20				**0.2**	**0.2**	**0.2**				**0.2**	**0.2**				**0.2**		**0.2**		
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000				**0.24**	**0.19**	**1.1**				**2.7**	**1.8**				**1.3**		**5**		
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1				**0.05**	**0.05**	**0.05**				**0.05**	**0.05**				**0.05**		**0.21**		
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23																			
INORGANIC	Vanadium	µg/g	86	86				**6.5**	**9.3**	**33**				**12**	**26**				**33**		**20**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																		
INORGANIC	Zinc	µg/g	290	340				**6.8**	**16**	**39**				**15**	**90**				**38**		**130**		
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH157	SLR BH157	SLR BH157	SLR BH157	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH161	SLR BH161	SLR BH161	SLR BH161
					Sample ID	BH 157 14-16'	BH 157 16-18'	BH 157 2-4'	BH 157 4-6'	BH158 0-2'	BH158 10-12'	BH158 14-16'	BH158 22-24'	BH158 4-6'	BH 159 0-2'	BH 159 10-12'	BH 159 12-14'	BH 159 14-16'	BH 159 2-4'	BH 159 8-10'	BH 161 0-2'	BH 161 10-12'	BH 161 12-14'	BH 161 14-16'
					Start Depth	4.27	4.88	0.61	1.22	0	3.05	4.27	6.71	1.22	0	3.05	3.66	4.27	0.61	2.44	0	3.05	3.66	4.27
					End Depth	4.88	5.49	1.22	1.83	0.61	3.66	4.88	7.32	1.83	0.61	3.66	4.27	4.88	1.22	3.05	0.61	3.66	4.27	4.88
					Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**0.1**		**0.005**		**6.2**			**1.4**		**0.005**					**0.005**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.008**		**0.005**		**8.5**			**1.2**		**0.005**					**0.005**
PAH	Acenaphthene	µg/g	0.072	7.9	560				**0.02**		**0.02**		**6.4**			**0.71**		**0.01**					**0.01**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**0.005**		**0.0057**		**1.1**			**0.005**		**0.005**					**0.005**
PAH	Anthracene	µg/g	0.22	0.67	0.67				**0.02**		**0.01**		**3.6**			**0.005**		**0.005**					**0.01**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**0.02**		**0.02**		**2.2**			**0.01**		**0.01**					**0.01**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**0.01**		**0.01**		**1.6**			**0.005**		**0.005**					**0.01**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**0.01**		**0.01**		**1.1**			**0.01**		**0.01**					**0.01**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**0.02**		**0.02**		**0.49**			**0.02**		**0.02**					**0.02**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**0.01**		**0.01**		**0.35**			**0.01**		**0.01**					**0.01**
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**0.02**		**0.01**		**1.6**			**0.01**		**0.01**					**0.01**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**0.02**		**0.02**		**0.16**			**0.02**		**0.02**					**0.02**
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**0.04**		**0.03**		**3**			**0.01**		**0.005**					**0.04**
PAH	Fluorene	µg/g	0.19	62	62				**0.09**		**0.01**		**3.5**			**0.05**		**0.005**					**0.0086**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**0.02**		**0.02**		**0.47**			**0.02**		**0.02**					**0.02**
PAH	Naphthalene	µg/g	0.09	0.6	200				**0.01**		**0.005**		**8.8**			**2.5**		**0.005**					**0.005**
PAH	Phenanthrene	µg/g	0.69	6.2	270				**0.01**		**0.04**		**11**			**0.01**		**0.005**					**0.02**
PAH	Pyrene	µg/g	1	78	2600				**0.05**		**0.04**		**4.2**			**0.01**		**0.005**					**0.04**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**10**			**470**			**66**	**13**				**10**			**10**		**10**	**10**	
PHC	F1-BTEX	µg/g	25	55	55	**10**			**470**			**35**	**10**				**10**			**10**		**10**	**10**	
PHC	F2 (C10-C16)	µg/g	10	98	230	**10**			**4200**			**490**	**380**				**10**			**10**		**10**	**10**	
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300		**10**			**6700**			**160**	**380**				**10**			**140**		**10**	**10**	
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800		**10**			**2300**			**20**	**10**				**10**			**28**		**10**	**10**	
PHC	F4G-SG	µg/g	120	2800																			
PHC	**Chrom. to baseline at nC5No**	None				Yes			Yes			Yes	Yes				Yes			Yes		Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		**0.002**		**0.8**				**0.2**			**0.002**							
VOC	1,2-Dichloroethene (Total)	µg/g																					

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						Location	SLR BH157	SLR BH157	SLR BH157	SLR BH157	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH158	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH159	SLR BH161	SLR BH161	SLR BH161	SLR BH161
						Sample ID	BH 157 14-16'	BH 157 16-18'	BH 157 2-4'	BH 157 4-6'	BH158 0-2'	BH158 10-12'	BH158 14-16'	BH158 22-24'	BH158 4-6'	BH 159 0-2'	BH 159 10-12'	BH 159 12-14'	BH 159 14-16'	BH 159 2-4'	BH 159 8-10'	BH 161 0-2'	BH 161 10-12'	BH 161 12-14'	BH 161 14-16'
						Start Depth	4.27	4.88	0.61	1.22	0	3.05	4.27	6.71	1.22	0	3.05	3.66	4.27	0.61	2.44	0	3.05	3.66	4.27
						End Depth	4.88	5.49	1.22	1.83	0.61	3.66	4.88	7.32	1.83	0.61	3.66	4.27	4.88	1.22	3.05	0.61	3.66	4.27	4.88
						Date	02 Oct 2008	02 Oct 2008	02 Oct 2008	02 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	12 Dec 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	2-Butanone	µg/g	0.5	16	230		**0.03**		**10**				**3**			**0.03**								
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		**0.03**		**10**				**3**			**0.03**								
VOC	Acetone	µg/g	0.5	16	16		**0.1**		**40**				**10**			**0.2**								
VOC	Benzene	µg/g	0.02	0.21	14	**0.02**	**0.005**		**0.8**			**3.5**	**0.3**			**0.006**	**0.02**				**0.02**		**0.02**	**0.02**
VOC	Bromodichloromethane	µg/g	0.05	13	50		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Bromoform	µg/g	0.05	0.27	21		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Bromomethane	µg/g	0.05	0.05	1.4		**0.003**		**1**				**0.3**			**0.003**								
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Chloroform	µg/g	0.05	0.05	9.5		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		**0.003**		**1**				**0.3**			**0.005**								
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.02**	**0.005**		**0.8**			**14**	**1.8**			**0.002**	**0.02**				**0.02**		**0.02**	**0.02**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Toluene	µg/g	0.2	2.3	68	**0.02**	**0.01**		**0.8**			**0.19**	**0.2**			**0.008**	**0.02**				**0.02**		**0.02**	**0.02**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Trichloroethylene	µg/g	0.05	0.061	300		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Trichlorofluoromethane	µg/g	0.25	4																				
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		**0.002**		**0.8**				**0.2**			**0.002**								
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.02**	**0.005**		**0.8**			**4.2**	**0.7**			**0.003**	**0.02**				**0.02**		**0.02**	**0.02**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.04**	**0.01**		**0.8**			**9**	**1.4**			**0.01**	**0.04**				**0.04**		**0.04**	**0.04**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.04**	**0.02**		**0.8**			**13**	**2.1**			**0.01**	**0.04**				**0.04**		**0.04**	**0.04**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH161	SLR BH161	SLR BH161	SLR BH161	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH164
					Sample ID	BH 161 18-20'	BH 161 20-22'	BH 161 2-4'	BH 161 6-8'	BH162 0-2'	BH162 10-12'	BH162 18-20'	BH162 20-22'	BH162 2-4'	BH162 24-26'	BH162 26-28'	BH 163 10-12'	BH 163 16-18'	BH 163 18-20'	BH 163 2-4'	BH 163 4-6'	BH 163 6-8'	BH 163 8-10'	BH 164 10-12'
					Start Depth	5.49	6.1	0.61	1.83	0	3.05	5.49	6.1	0.61	7.32	7.92	3.05	4.88	5.49	0.61	1.22	1.83	2.44	3.05
					End Depth	6.1	6.71	1.22	2.44	0.61	3.66	6.1	6.71	1.22	7.92	8.53	3.66	5.49	6.1	1.22	1.83	2.44	3.05	3.66
					Date	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**57**	**46**	**3.9**	**29**	**14**	**21**	**48**	**21**	**25**	**17**	**18**	**36**	**27**	**21**	**31**	**21**	**24**	**40**	**38**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]					**7.77**		**7.61**				**7.69**						**7.09**	**7.16**			
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5				**0.2**		**1**				**0.67**						**0.2**	**6**		
INORGANIC	Arsenic	µg/g	18	18				**1**		**2.8**				**16**						**7.8**	**15**		
INORGANIC	Barium	µg/g	220	390				**9.4**		**41**				**220**						**61**	**48**		
INORGANIC	Beryllium	µg/g	2.5	4				**0.2**		**0.2**				**1.2**						**0.31**	**0.2**		
INORGANIC	Boron	µg/g	36	120																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5				**0.07**		**0.18**				**1.5**						**0.25**	**0.64**		
INORGANIC	Cadmium	µg/g	1.2	1.2				**0.1**		**0.14**				**0.18**						**0.1**	**0.13**		
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160				**5.4**		**6.9**				**27**						**14**	**8.4**		
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8				**0.2**		**0.2**				**0.2**						**1**	**0.2**		
INORGANIC	Cobalt	µg/g	22	22				**1.7**		**3.2**				**7.9**						**5.2**	**6.1**		
INORGANIC	Copper	µg/g	92	140				**3.5**		**25**				**30**						**23**	**64**		
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02			**0.01**		**0.01**				**0.01**						**0.1**	**0.1**		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7				**0.08**		**0.2**				**0.38**						**0.55**	**0.53**		
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120				**3.7**		**54**				**27**						**11**	**220**		
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14			**0.05**		**0.08**				**0.09**						**0.05**	**2.4**		
INORGANIC	Molybdenum	µg/g	2	6.9				**0.5**		**0.5**				**1.5**						**0.5**	**2.4**		
INORGANIC	Nickel	µg/g	82	100				**2.8**		**6.7**				**20**						**12**	**15**		
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4				**0.5**		**0.5**				**1.1**						**0.5**	**0.82**		
INORGANIC	Silver	µg/g	0.5	20				**0.2**		**0.2**				**0.2**						**0.2**	**0.89**		
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000				**0.24**		**0.3**				**7.9**						**1.9**	**1.1**		
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1				**0.05**		**0.05**				**0.32**						**0.11**	**0.22**		
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23																			
INORGANIC	Vanadium	µg/g	86	86				**17**		**15**				**34**						**18**	**12**		
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																		
INORGANIC	Zinc	µg/g	290	340				**10**		**66**				**45**						**41**	**77**		
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH161	SLR BH161	SLR BH161	SLR BH161	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH164
					Sample ID	BH 161 18-20'	BH 161 20-22'	BH 161 2-4'	BH 161 6-8'	BH162 0-2'	BH162 10-12'	BH162 18-20'	BH162 20-22'	BH162 2-4'	BH162 24-26'	BH162 26-28'	BH 163 10-12'	BH 163 16-18'	BH 163 18-20'	BH 163 2-4'	BH 163 4-6'	BH 163 6-8'	BH 163 8-10'	BH 164 10-12'
					Start Depth	5.49	6.1	0.61	1.83	0	3.05	5.49	6.1	0.61	7.32	7.92	3.05	4.88	5.49	0.61	1.22	1.83	2.44	3.05
					End Depth	6.1	6.71	1.22	2.44	0.61	3.66	6.1	6.71	1.22	7.92	8.53	3.66	5.49	6.1	1.22	1.83	2.44	3.05	3.66
					Date	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**0.67**		**0.02**	**0.005**					**0.01**	**0.005**					**0.01**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.6**		**0.01**	**0.005**					**0.01**	**0.005**					**0.01**
PAH	Acenaphthene	µg/g	0.072	7.9	560				**0.21**		**0.04**	**0.01**					**0.06**	**0.01**					**0.11**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**0.1**		**0.02**	**0.005**					**0.02**	**0.005**					**0.04**
PAH	Anthracene	µg/g	0.22	0.67	0.67				**0.4**		**0.11**	**0.005**					**0.09**	**0.005**					**0.06**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**0.85**		**0.3**	**0.01**					**0.09**	**0.01**					**0.14**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**0.76**		**0.36**	**0.01**					**0.06**	**0.005**					**0.09**
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**0.93**		**0.39**	**0.01**					**0.05**	**0.01**					**0.08**
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**0.51**		**0.2**	**0.02**					**0.04**	**0.02**					**0.04**
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**0.35**		**0.14**	**0.01**					**0.02**	**0.01**					**0.02**
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**0.65**		**0.23**	**0.01**					**0.06**	**0.01**					**0.11**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**0.4**		**0.04**	**0.02**					**0.04**	**0.02**					**0.04**
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**1.8**		**0.61**	**0.02**					**0.2**	**0.005**					**0.35**
PAH	Fluorene	µg/g	0.19	62	62				**0.18**		**0.03**	**0.0056**					**0.07**	**0.005**					**0.12**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**0.48**		**0.21**	**0.02**					**0.04**	**0.02**					**0.04**
PAH	Naphthalene	µg/g	0.09	0.6	200				**0.44**		**0.01**	**0.01**					**0.01**	**0.005**					**0.01**
PAH	Phenanthrene	µg/g	0.69	6.2	270				**1.9**		**0.33**	**0.02**					**0.38**	**0.005**					**0.56**
PAH	Pyrene	µg/g	1	78	2600				**1.5**		**0.54**	**0.02**					**0.23**	**0.005**					**0.42**
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55	**20**							**10**		**10**			**10**			**10**	**10**	
PHC	F1-BTEX	µg/g	25	55	55	**20**							**10**		**10**			**10**			**10**	**10**	
PHC	F2 (C10-C16)	µg/g	10	98	230	**20**							**10**		**10**			**10**			**10**	**10**	
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300		**91**							**10**		**10**			**10**			**10**	**10**	
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800		**20**							**10**		**10**			**10**			**10**	**11**	
PHC	F4G-SG	µg/g	120	2800																			
PHC	**Chrom. to baseline at nC5No**	None				Yes							Yes		Yes						Yes	Yes	
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		**0.002**									**0.002**	**0.002**						
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		**0.002**									**0.002**	**0.002**						
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		**0.002**									**0.002**	**0.002**						
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120		**0.002**									**0.002**	**0.002**						
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		**0.002**									**0.002**	**0.002**						
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		**0.002**									**0.002**	**0.002**						
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		**0.002**									**0.002**	**0.002**						
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		**0.002**									**0.002**	**0.002**						
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		**0.002**									**0.002**	**0.002**						
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH161	SLR BH161	SLR BH161	SLR BH161	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH162	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH163	SLR BH164
						Sample ID	BH 161 18-20'	BH 161 20-22'	BH 161 2-4'	BH 161 6-8'	BH162 0-2'	BH162 10-12'	BH162 18-20'	BH162 20-22'	BH162 2-4'	BH162 24-26'	BH162 26-28'	BH 163 10-12'	BH 163 16-18'	BH 163 18-20'	BH 163 2-4'	BH 163 4-6'	BH 163 6-8'	BH 163 8-10'	BH 164 10-12'
						Start Depth	5.49	6.1	0.61	1.83	0	3.05	5.49	6.1	0.61	7.32	7.92	3.05	4.88	5.49	0.61	1.22	1.83	2.44	3.05
						End Depth	6.1	6.71	1.22	2.44	0.61	3.66	6.1	6.71	1.22	7.92	8.53	3.66	5.49	6.1	1.22	1.83	2.44	3.05	3.66
						Date	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	14 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		**0.002**										**0.002**	**0.002**							
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		**0.002**										**0.002**	**0.002**							
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																					
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		**0.002**										**0.002**	**0.002**							
VOC	2-Butanone	µg/g	0.5	16	230		**0.09**										**0.03**	**0.03**							
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		**0.03**										**0.03**	**0.03**							
VOC	Acetone	µg/g	0.5	16	16		**0.4**										**0.1**	**0.1**							
VOC	Benzene	µg/g	0.02	0.21	14	**0.04**	**0.006**							**0.02**		**0.02**	**0.004**	**0.002**		**0.02**			**0.08**	**0.02**	
VOC	Bromodichloromethane	µg/g	0.05	13	50		**0.002**										**0.002**	**0.002**							
VOC	Bromoform	µg/g	0.05	0.27	21		**0.002**										**0.002**	**0.002**							
VOC	Bromomethane	µg/g	0.05	0.05	1.4		**0.003**										**0.003**	**0.003**							
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		**0.002**										**0.002**	**0.002**							
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		**0.002**										**0.002**	**0.002**							
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		**0.002**										**0.002**	**0.002**							
VOC	Chloroform	µg/g	0.05	0.05	9.5		**0.002**										**0.002**	**0.002**							
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		**0.004**										**0.002**	**0.002**							
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			**0.002**										**0.002**	**0.002**							
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																				
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		**0.003**										**0.003**	**0.003**							
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.04**	**0.003**							**0.02**		**0.02**	**0.004**	**0.002**		**0.02**			**0.02**	**0.02**	
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		**0.002**										**0.002**	**0.002**							
VOC	n-Hexane	µg/g	0.05	2.8	54																				
VOC	Styrene	µg/g	0.05	0.7	66		**0.002**										**0.002**	**0.002**							
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		**0.002**										**0.002**	**0.002**							
VOC	Toluene	µg/g	0.2	2.3	68	**0.04**	**0.01**							**0.02**		**0.02**	**0.01**	**0.006**		**0.02**			**0.04**	**0.02**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		**0.002**										**0.002**	**0.002**							
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			**0.002**										**0.002**	**0.002**							
VOC	Trichloroethylene	µg/g	0.05	0.061	300		**0.002**										**0.002**	**0.002**							
VOC	Trichlorofluoromethane	µg/g	0.25	4																					
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		**0.07**										**0.002**	**0.002**							
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.04**	**0.003**							**0.02**		**0.02**	**0.003**	**0.002**		**0.02**			**0.02**	**0.02**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.08**	**0.01**							**0.04**		**0.04**	**0.01**	**0.007**		**0.04**			**0.04**	**0.04**	
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.08**	**0.01**							**0.04**		**0.04**	**0.01**	**0.009**		**0.04**			**0.04**	**0.04**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH167
					Sample ID	BH 164 12-14'	BH 164 20-22'	BH 164 22-24'	BH 164 2-4'	BH 164 4-6'	BH 164 6-8'	BH 165 0-2'	BH 165 10-12'	BH 165 12-14'	BH 165 14-16'	BH 165 18-20'	BH 165 2-4'	BH 165 8-10'	BH 166 0-2'	BH 166 14-16'	BH 166 22-24'	BH 166 2-4'	BH 166 6-8'	BH 167 12-14'
					Start Depth	3.66	6.1	6.71	0.61	1.83	1.83	0	3.05	3.66	4.27	5.49	0.61	2.44	0	4.27	6.71	0.61	1.83	3.66
					End Depth	4.27	6.71	7.32	1.22	1.83	2.44	0.61	3.66	4.27	4.88	6.1	1.22	3.05	0.61	4.88	7.32	1.22	2.44	4.27
					Date	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	08 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																		
ABN	2,4-Dinitrophenol	µg/g	2	38	59																		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																		
ABN	Phenol	µg/g	0.5	9.4	46																		
CHEMISTRY	Ammonia	µg/g																					
CHEMISTRY	Bromide	µg/g																					
CHEMISTRY	Chlorite	µg/g																					
CHEMISTRY	Fluoride	µg/g	110 [c.]																				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																				
CHEMISTRY	Moisture, percent	%				**23**	**28**	**25**	**16**	**8.5**	**28**	**12**	**35**	**21**	**74**	**31**	**13**	**27**	**4.1**	**23**	**17**	**30**	**31**	**26**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																				
CHEMISTRY	Nitrite (as N)	µg/g																					
Chemistry	ortho-Phosphate	µg/g																					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]						**7.53**	**7.46**		**8.05**					**7.79**		**7.74**			**7.63**		
CHEMISTRY	Sulfate	µg/g																					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																		
GENCHEM	MOISTURE AT LIQUID LIMIT	%																					
INORGANIC	Aluminum	µg/g	26000 [c.]																				
INORGANIC	Antimony	µg/g	1.3	7.5					**1.5**	**1.1**		**0.2**					**0.27**		**0.48**			**4**	
INORGANIC	Arsenic	µg/g	18	18					**6.9**	**18**		**2.8**					**1.6**		**2.4**			**7.7**	
INORGANIC	Barium	µg/g	220	390					**29**	**230**		**7.8**					**23**		**18**			**97**	
INORGANIC	Beryllium	µg/g	2.5	4					**0.2**	**0.59**		**0.2**					**0.27**		**0.2**			**0.25**	
INORGANIC	Boron	µg/g	36	120																			
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5					**0.75**	**0.25**		**0.04**					**0.21**		**0.07**			**1.1**	
INORGANIC	Cadmium	µg/g	1.2	1.2					**0.48**	**1.1**		**0.18**					**0.14**		**0.93**			**0.78**	
INORGANIC	Calcium	µg/g	49000 [c.]																				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																				
INORGANIC	Chromium	µg/g	70	160					**16**	**13**		**3.1**					**7**		**7.9**			**18**	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8					**1**	**0.2**		**0.2**					**0.2**		**0.3**			**0.2**	
INORGANIC	Cobalt	µg/g	22	22					**4.5**	**4.2**		**1.7**					**2.8**		**1.7**			**4.2**	
INORGANIC	Copper	µg/g	92	140					**42**	**30**		**5.8**					**8.8**		**43**			**110**	
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02				**0.1**	**0.01**		**0.01**					**0.01**		**0.01**			**0.01**	
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7					**0.61**	**0.2**		**0.11**					**0.21**		**0.19**			**0.3**	
INORGANIC	Iron	µg/g	34000 [c.]																				
INORGANIC	Lead	µg/g	120	120					**37**	**680**		**11**					**24**		**62**			**190**	
INORGANIC	Magnesium	µg/g	15000 [c.]																				
INORGANIC	Manganese	µg/g	1400 [c.]																				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14				**0.15**	**0.4**		**0.05**					**0.05**		**0.3**			**0.19**	
INORGANIC	Molybdenum	µg/g	2	6.9					**0.92**	**2.4**		**0.5**					**0.5**		**0.95**			**0.94**	
INORGANIC	Nickel	µg/g	82	100					**15**	**13**		**4**					**5.3**		**6.1**			**13**	
INORGANIC	Phosphorus	µg/g	1500 [c.]																				
INORGANIC	Potassium	µg/g	4900 [c.]																				
INORGANIC	Selenium	µg/g	1.5	2.4					**0.5**	**0.99**		**0.5**					**0.5**		**0.5**			**0.5**	
INORGANIC	Silver	µg/g	0.5	20					**0.2**	**0.2**		**0.2**					**0.2**		**0.2**			**0.2**	
INORGANIC	Sodium	µg/g	180 [c.]																				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000					**0.15**	**0.24**		**0.26**					**0.69**		**0.3**			**0.28**	
INORGANIC	Strontium	µg/g	77 [c.]																				
INORGANIC	Thallium	µg/g	1	1					**0.09**	**0.18**		**0.06**					**0.05**		**0.05**			**0.09**	
INORGANIC	Titanium	µg/g	4700 [c.]																				
INORGANIC	Uranium (U)	µg/g	2.5	23																			
INORGANIC	Vanadium	µg/g	86	86					**11**	**20**		**6.2**					**13**		**5**			**13**	
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																		
INORGANIC	Zinc	µg/g	290	340					**160**	**130**		**45**					**31**		**98**			**170**	
METAL	Zirconium	µg/g	48 [e.]																				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH167
					Sample ID	BH 164 12-14'	BH 164 20-22'	BH 164 22-24'	BH 164 2-4'	BH 164 4-6'	BH 164 6-8'	BH 165 0-2'	BH 165 10-12'	BH 165 12-14'	BH 165 14-16'	BH 165 18-20'	BH 165 2-4'	BH 165 8-10'	BH 166 0-2'	BH 166 14-16'	BH 166 22-24'	BH 166 2-4'	BH 166 6-8'	BH 167 12-14'
					Start Depth	3.66	6.1	6.71	0.61	1.22	1.83	0	3.05	3.66	4.27	5.49	0.61	2.44	0	4.27	6.71	0.61	1.83	3.66
					End Depth	4.27	6.71	7.32	1.22	1.83	2.44	0.61	3.66	4.27	4.88	6.1	1.22	3.05	0.61	4.88	7.32	1.22	2.44	4.27
					Date	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	08 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																		
OCP	Hexachloroethane	µg/g	0.01	0.089	22																		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																					
other SVOC	2-Chloronaphthalene	µg/g																					
other SVOC	2-Hexanone	µg/g																					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																					
other SVOC	4-Chlorophenyl Phenylether	µg/g																					
other SVOC	Bis (2-chloroethoxy) methane	µg/g																					
other SVOC	Butyl benzyl phthalate	µg/g																					
other SVOC	Chloroethane	µg/g																					
other SVOC	Chloromethane	µg/g																					
other SVOC	Di-N-Butylphthalate	µg/g																					
other SVOC	Di-n-octyl phthalate	µg/g																					
other SVOC	Isophorone	µg/g																					
other SVOC	Nitrobenzene	µg/g																					
other SVOC	N-Nitrosodi-N-propylamine	µg/g																					
other SVOC	N-Nitrosodiphenylamine	µg/g																					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																		
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**						**0.005**	**0.04**					**0.005**		**0.005**	
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**0.005**						**0.005**	**0.04**					**0.005**		**0.005**	
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.01**						**0.01**	**0.08**					**0.01**		**0.02**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.005**						**0.005**	**0.04**					**0.005**		**0.01**	
PAH	Anthracene	µg/g	0.22	0.67	0.67			**0.005**						**0.0061**	**0.04**					**0.005**		**0.02**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.01**						**0.01**	**0.08**					**0.01**		**0.05**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.005**						**0.0053**	**0.04**					**0.005**		**0.08**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**0.01**						**0.01**	**0.08**					**0.01**		**0.08**	
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																		
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**0.02**						**0.02**	**0.16**					**0.02**		**0.06**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.01**						**0.01**	**0.08**					**0.01**		**0.02**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.01**						**0.01**	**0.08**					**0.01**		**0.04**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**0.02**						**0.02**	**0.16**					**0.02**		**0.02**	
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.005**						**0.01**	**0.04**					**0.005**		**0.09**	
PAH	Fluorene	µg/g	0.19	62	62			**0.005**						**0.0059**	**0.04**					**0.005**		**0.0083**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**0.02**						**0.02**	**0.16**					**0.02**		**0.03**	
PAH	Naphthalene	µg/g	0.09	0.6	200			**0.005**						**0.005**	**0.04**					**0.005**		**0.01**	
PAH	Phenanthrene	µg/g	0.69	6.2	270			**0.005**						**0.02**	**0.04**					**0.005**		**0.06**	
PAH	Pyrene	µg/g	1	78	2600			**0.005**						**0.02**	**0.04**					**0.005**		**0.11**	
PCB	Aroclor 1016	µg/g																					
PCB	Aroclor 1221	µg/g																					
PCB	Aroclor 1232	µg/g																					
PCB	Aroclor 1242	µg/g																					
PCB	Aroclor 1248	µg/g																					
PCB	Aroclor 1254	µg/g																					
PCB	Aroclor 1260	µg/g																					
PCB	Aroclor 1262	µg/g																					
PCB	Aroclor 1268	µg/g																					
PCB	PCB, Total	µg/g	0.3	0.35																			
Perchlorate	Perchlorate	µg/g																					
PHC	F1 (C6-C10)	µg/g	25	55	55		**10**				**10**		**10**			**10**		**10**		**10**		**10**	**10**
PHC	F1-BTEX	µg/g	25	55	55		**10**				**10**		**10**			**10**		**10**		**10**		**10**	**10**
PHC	F2 (C10-C16)	µg/g	10	98	230		**10**				**26**		**70**			**10**		**10**		**10**		**10**	**10**
PHC	F2-Naphth	µg/g	10	98	230																		
PHC	F3 (C16-C34)	µg/g	240	300			**10**				**150**		**290**			**18**		**11**		**15**		**49**	**43**
PHC	F3-PAH	µg/g	240	300																			
PHC	F4 (C34-C50)	µg/g	120	2800			**10**				**10**		**10**			**10**		**10**		**10**		**10**	**19**
PHC	F4G-SG	µg/g	120	2800																			
PHC	**Chrom. to baseline at nC5No**	None					Yes				Yes		Yes			Yes		Yes		Yes		Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g																					
SVOC	Hexachlorocyclopentadiene	µg/g																					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,2-Dichloroethene (Total)	µg/g																					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH164	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH165	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH166	SLR BH167
					Sample ID	BH 164 12-14'	BH 164 20-22'	BH 164 22-24'	BH 164 2-4'	BH 164 4-6'	BH 164 6-8'	BH 165 0-2'	BH 165 10-12'	BH 165 12-14'	BH 165 14-16'	BH 165 18-20'	BH 165 2-4'	BH 165 8-10'	BH 166 0-2'	BH 166 14-16'	BH 166 22-24'	BH 166 2-4'	BH 166 6-8'	BH 167 12-14'
					Start Depth	3.66	6.1	6.71	0.61	1.22	1.83	0	3.05	3.66	4.27	5.49	0.61	2.44	0	4.27	6.71	0.61	1.83	3.66
					End Depth	4.27	6.71	7.32	1.22	1.83	2.44	0.61	3.66	4.27	4.88	6.1	1.22	3.05	0.61	4.88	7.32	1.83	2.44	4.27
					Date	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	07 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	08 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	**0.002**								**0.002**					**0.002**				**0.002**
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																			
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	**0.002**								**0.002**					**0.002**				**0.002**
VOC	2-Butanone	µg/g	0.5	16	230	**0.03**								**0.03**					**0.03**				**0.03**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	**0.03**								**0.03**					**0.03**				**0.03**
VOC	Acetone	µg/g	0.5	16	16	**0.1**								**0.1**					**0.1**				**0.1**
VOC	Benzene	µg/g	0.02	0.21	14	**0.002**	**0.02**				**0.02**		**0.02**	**0.002**		**0.02**		**0.02**	**0.004**			**0.02**	**0.003**
VOC	Bromodichloromethane	µg/g	0.05	13	50	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Bromoform	µg/g	0.05	0.27	21	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Bromomethane	µg/g	0.05	0.05	1.4	**0.003**								**0.003**					**0.003**				**0.003**
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Chloroform	µg/g	0.05	0.05	9.5	**0.002**								**0.002**					**0.002**				**0.002**
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	**0.002**								**0.002**					**0.002**				**0.002**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**								**0.002**					**0.002**				**0.002**
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																		
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	**0.003**								**0.003**					**0.003**				**0.003**
VOC	Ethylbenzene	µg/g	0.05	2	17	**0.002**	**0.02**				**0.02**		**0.02**	**0.002**		**0.02**		**0.02**	**0.002**			**0.02**	**0.002**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	**0.002**								**0.002**					**0.002**				**0.002**
VOC	n-Hexane	µg/g	0.05	2.8	54																		
VOC	Styrene	µg/g	0.05	0.7	66	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Toluene	µg/g	0.2	2.3	68	**0.008**	**0.02**				**0.02**		**0.02**	**0.006**		**0.02**		**0.02**	**0.01**			**0.02**	**0.008**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	**0.002**								**0.002**					**0.002**				**0.002**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		**0.002**								**0.002**					**0.002**				**0.002**
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Trichlorofluoromethane	µg/g	0.25	4																			
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	**0.002**								**0.002**					**0.002**				**0.002**
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.002**	**0.02**				**0.02**		**0.02**	**0.002**		**0.02**		**0.02**	**0.003**			**0.02**	**0.002**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**0.007**	**0.04**				**0.04**		**0.04**	**0.005**		**0.04**		**0.04**	**0.009**			**0.04**	**0.007**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**0.009**	**0.04**				**0.04**		**0.04**	**0.005**		**0.04**		**0.04**	**0.01**			**0.04**	**0.007**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH170	SLR BH170
					Sample ID	BH 167 2-4'	BH 167 26-28'	BH 167 6-8'	BH 167 8-10'	BH 1674-6'	BH 168 10-12'	BH 168 22-24'	BH 168 2-4'	BH 168 4-6'	BH 168 8-10'	BH168 8-10'	BH 169 10-12'	BH 169 12-14'	BH 169 18-20'	BH 169 2-4'	BH 169 4-6'	BH 169 6-8'	BH 169 8-10'	BH 170 10-12'	BH 170 12-14'
					Start Depth	0.61	7.92	1.83	2.44	1.22	3.05	6.71	0.61	1.22	2.44	2.44	3.05	3.66	5.49	0.61	1.22	1.83	2.44	3.05	3.66
					End Depth	1.22	8.53	2.44	3.05	1.83	3.66	7.32	1.22	1.83	3.05	3.05	3.66	4.27	6.1	1.22	1.83	2.44	3.05	3.66	4.27
					Date	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**6.6**	**13**	**25**	**33**	**6.6**	**14**	**66**	**9.5**	**6.8**	**13**	**12**	**30**	**30**	**13**	**13**	**5.8**	**23**	**33**	**48**	**36**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.56**				**7.26**			**8.33**	**11.7**						**8.51**	**7.28**				
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		**9.5**				**12**			**0.2**	**0.2**						**2.4**	**0.2**				
INORGANIC	Arsenic	µg/g	18	18		**12**				**3.3**			**2.5**	**3.4**						**8.3**	**2.9**				
INORGANIC	Barium	µg/g	220	390		**210**				**28**			**52**	**66**						**110**	**34**				
INORGANIC	Beryllium	µg/g	2.5	4		**0.35**				**0.2**			**0.27**	**0.33**						**0.54**	**0.26**				
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.32**				**1.2**			**0.48**	**0.25**						**0.92**	**0.04**				
INORGANIC	Cadmium	µg/g	1.2	1.2		**20**				**0.24**			**0.18**	**0.22**						**1.3**	**0.1**				
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**49**				**9.3**			**24**	**27**						**18**	**8.4**				
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**				**0.2**			**0.2**	**0.2**						**0.2**	**0.2**				
INORGANIC	Cobalt	µg/g	22	22		**8.4**				**5.2**			**5.1**	**4.6**						**7**	**4**				
INORGANIC	Copper	µg/g	92	140		**550**				**29**			**15**	**16**						**96**	**11**				
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.01**				**0.03**			**0.01**	**0.01**						**0.01**	**0.01**				
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.34**				**0.28**			**0.17**	**2.8**						**2.5**	**0.36**				
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**1600**				**140**			**35**	**31**						**590**	**24**				
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.32**				**0.05**			**0.07**	**0.08**						**0.69**	**0.27**				
INORGANIC	Molybdenum	µg/g	2	6.9		**6.9**				**1.1**			**0.61**	**1.4**						**2.1**	**0.5**				
INORGANIC	Nickel	µg/g	82	100		**38**				**10**			**11**	**10**						**30**	**8.6**				
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		**0.85**				**0.5**			**0.5**	**0.5**						**0.61**	**0.5**				
INORGANIC	Silver	µg/g	0.5	20		**0.2**				**0.2**			**0.22**	**0.2**						**0.45**	**0.2**				
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**1.1**				**2.3**			**0.21**	**0.25**						**0.45**	**5.4**				
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		**0.14**				**0.05**			**0.12**	**0.09**						**0.11**	**0.1**				
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86		**15**				**6.2**			**24**	**29**						**28**	**17**				
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340		**470**				**56**			**70**	**100**						**490**	**30**				
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH170	SLR BH170
					Sample ID	BH 167 2-4'	BH 167 26-28'	BH 167 6-8'	BH 167 8-10'	BH 1674-6'	BH 168 10-12'	BH 168 22-24'	BH 168 2-4'	BH 168 4-6'	BH 168 8-10'	BH168 8-10'	BH 169 10-12'	BH 169 12-14'	BH 169 18-20'	BH 169 2-4'	BH 169 4-6'	BH 169 6-8'	BH 169 8-10'	BH 170 10-12'	BH 170 12-14'
					Start Depth	0.61	7.92	1.83	2.44	1.22	3.05	6.71	0.61	1.22	2.44	2.44	3.05	3.66	5.49	0.61	1.22	1.83	2.44	3.05	3.66
					End Depth	1.22	8.53	2.44	3.05	1.83	3.66	7.32	1.22	1.83	3.05	3.05	3.66	4.27	6.1	1.22	1.83	2.44	3.05	3.66	4.27
					Date	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																				
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																				
OCP	Hexachloroethane	µg/g	0.01	0.089	22																				
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																							
other SVOC	2-Chloronaphthalene	µg/g																							
other SVOC	2-Hexanone	µg/g																							
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																							
other SVOC	4-Chlorophenyl Phenylether	µg/g																							
other SVOC	Bis (2-chloroethoxy) methane	µg/g																							
other SVOC	Butyl benzyl phthalate	µg/g																							
other SVOC	Chloroethane	µg/g																							
other SVOC	Chloromethane	µg/g																							
other SVOC	Di-N-Butylphthalate	µg/g																							
other SVOC	Di-n-octyl phthalate	µg/g																							
other SVOC	Isophorone	µg/g																							
other SVOC	Nitrobenzene	µg/g																							
other SVOC	N-Nitrosodi-N-propylamine	µg/g																							
other SVOC	N-Nitrosodiphenylamine	µg/g																							
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																				
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76				**0.005**	**0.09**	**0.005**				**0.44**			**0.005**	**0.005**					**0.005**	
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76				**0.005**	**0.09**	**0.005**				**0.01**			**0.005**	**0.005**					**0.005**	
PAH	Acenaphthene	µg/g	0.072	7.9	560				**0.01**	**0.01**	**0.02**				**0.24**			**0.01**	**0.01**					**0.02**	
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15				**0.0054**	**0.01**	**0.0083**				**0.07**			**0.005**	**0.0056**					**0.01**	
PAH	Anthracene	µg/g	0.22	0.67	0.67				**0.0051**	**0.01**	**0.005**				**0.11**			**0.005**	**0.0074**					**0.01**	
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11				**0.01**	**0.07**	**0.01**				**0.01**			**0.01**	**0.02**					**0.05**	
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13				**0.01**	**0.04**	**0.005**				**0.02**			**0.005**	**0.01**					**0.04**	
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78					**0.01**	**0.06**	**0.01**				**0.01**			**0.01**	**0.01**					**0.03**	
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																				
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13				**0.02**	**0.04**	**0.02**				**0.08**			**0.02**	**0.02**					**0.02**	
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13				**0.01**	**0.01**	**0.01**				**0.01**			**0.01**	**0.01**					**0.01**	
PAH	Chrysene	µg/g	2.8	7	3.6E+11				**0.01**	**0.12**	**0.01**				**0.01**			**0.01**	**0.01**					**0.04**	
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13				**0.02**	**0.02**	**0.02**				**0.02**			**0.02**	**0.02**					**0.02**	
PAH	Fluoranthene	µg/g	0.69	0.69	40000				**0.01**	**0.08**	**0.005**				**0.03**			**0.005**	**0.06**					**0.11**	
PAH	Fluorene	µg/g	0.19	62	62				**0.005**	**0.0087**	**0.05**				**0.43**			**0.005**	**0.005**					**0.0096**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13				**0.02**	**0.03**	**0.02**				**0.02**			**0.02**	**0.02**					**0.02**	
PAH	Naphthalene	µg/g	0.09	0.6	200				**0.005**	**0.07**	**0.005**				**0.02**			**0.005**	**0.005**					**0.0065**	
PAH	Phenanthrene	µg/g	0.69	6.2	270				**0.0071**	**0.16**	**0.005**				**0.6**			**0.005**	**0.01**					**0.01**	
PAH	Pyrene	µg/g	1	78	2600				**0.02**	**0.13**	**0.005**				**0.07**			**0.005**	**0.08**					**0.13**	
PCB	Aroclor 1016	µg/g																							
PCB	Aroclor 1221	µg/g																							
PCB	Aroclor 1232	µg/g																							
PCB	Aroclor 1242	µg/g																							
PCB	Aroclor 1248	µg/g																							
PCB	Aroclor 1254	µg/g																							
PCB	Aroclor 1260	µg/g																							
PCB	Aroclor 1262	µg/g																							
PCB	Aroclor 1268	µg/g																							
PCB	PCB, Total	µg/g	0.3	0.35																					
Perchlorate	Perchlorate	µg/g																							
PHC	F1 (C6-C10)	µg/g	25	55	55		**10**	**11**			**10**	**30**					**10**					**10**			
PHC	F1-BTEX	µg/g	25	55	55		**10**	**10**			**10**	**30**					**10**					**10**			
PHC	F2 (C10-C16)	µg/g	10	98	230		**10**	**14**			**25**	**30**					**10**					**10**			
PHC	F2-Naphth	µg/g	10	98	230																				
PHC	F3 (C16-C34)	µg/g	240	300			**10**	**29**			**10**	**86**					**10**					**10**			
PHC	F3-PAH	µg/g	240	300																					
PHC	F4 (C34-C50)	µg/g	120	2800			**10**	**10**			**10**	**30**					**10**					**10**			
PHC	F4G-SG	µg/g	120	2800																					
PHC	**Chrom. to baseline at nC5No**	None					Yes	Yes			Yes	Yes					Yes					Yes			
PHC	Total Hydrocarbons (C6-C50)	µg/g																							
SVOC	Hexachlorocyclopentadiene	µg/g																							
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180										**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,2-Dichloroethene (Total)	µg/g																							

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH167	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH168	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH169	SLR BH170	SLR BH170
						Sample ID	BH 167 2-4'	BH 167 26-28'	BH 167 6-8'	BH 167 8-10'	BH 1674-6'	BH 168 10-12'	BH 168 22-24'	BH 168 2-4'	BH 168 4-6'	BH 168 8-10'	BH168 8-10'	BH 169 10-12'	BH 169 12-14'	BH 169 18-20'	BH 169 2-4'	BH 169 4-6'	BH 169 6-8'	BH 169 8-10'	BH 170 10-12'	BH 170 12-14'
						Start Depth	0.61	7.92	1.83	2.44	1.22	3.05	6.71	0.61	1.22	2.44	2.44	3.05	3.66	5.49	0.61	1.22	1.83	2.44	3.05	3.66
						End Depth	1.22	8.53	2.44	3.05	1.83	3.66	7.32	1.22	1.83	3.05	3.05	3.66	4.27	6.1	1.22	1.83	2.44	3.05	3.66	4.27
						Date	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	08 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																						
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	2-Butanone	µg/g	0.5	16	230											**1**	**3**		**0.03**				**0.03**		**0.03**	**0.03**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150											**1**	**3**		**0.03**				**0.03**		**0.03**	**0.03**
VOC	Acetone	µg/g	0.5	16	16											**5**	**10**		**0.1**				**0.1**		**0.1**	**0.1**
VOC	Benzene	µg/g	0.02	0.21	14		**0.02**	**0.68**			**0.02**	**0.06**				**0.1**	**0.2**	**0.02**	**0.002**				**0.002**	**0.02**	**0.003**	**0.003**
VOC	Bromodichloromethane	µg/g	0.05	13	50											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Bromoform	µg/g	0.05	0.27	21											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Bromomethane	µg/g	0.05	0.05	1.4											**0.2**	**0.3**		**0.003**				**0.003**		**0.003**	**0.003**
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Chloroform	µg/g	0.05	0.05	9.5											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05												**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																					
VOC	Dichloromethane	µg/g	0.05	0.1	7.4											**0.2**	**0.3**		**0.003**				**0.003**		**0.003**	**0.003**
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.02**	**0.26**			**0.02**	**0.06**				**0.1**	**0.2**	**0.02**	**0.002**				**0.002**	**0.02**	**0.002**	**0.002**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	n-Hexane	µg/g	0.05	2.8	54																					
VOC	Styrene	µg/g	0.05	0.7	66											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Toluene	µg/g	0.2	2.3	68		**0.02**	**1.7**			**0.02**	**0.06**				**0.1**	**0.2**	**0.02**	**0.007**				**0.005**	**0.02**	**0.01**	**0.009**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05												**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Trichloroethylene	µg/g	0.05	0.061	300											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Trichlorofluoromethane	µg/g	0.25	4																						
VOC	Vinyl Chloride	µg/g	0.02	0.02	270											**0.1**	**0.2**		**0.002**				**0.002**		**0.002**	**0.002**
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.02**	**0.41**			**0.02**	**0.06**				**0.1**	**0.2**	**0.02**	**0.002**				**0.002**	**0.02**	**0.003**	**0.002**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**0.04**	**0.56**			**0.04**	**0.12**				**0.1**	**0.2**	**0.04**	**0.006**				**0.005**	**0.04**	**0.01**	**0.008**
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**0.04**	**0.96**			**0.04**	**0.12**				**0.1**	**0.2**	**0.04**	**0.006**				**0.005**	**0.04**	**0.01**	**0.01**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	Terrapex MW101	Terrapex MW101
					Sample ID	BH 170 2-4'	BH 170 4-6'	BH 170 6-8'	BH 170 8-10'	BH170 14-16'	BH171 0-2'	BH171 10-12'	BH171 14-16'	BH171 20-22'	BH171 2-4'	BH171 4-6'	DUP E	BH172 0-2'	BH172 10-12'	BH172 18-20'	BH172 2-4'	BH172 4-6'	BH172 6-8'	MW101D	MW101I
					Start Depth	0.61	1.22	1.83	2.44	4.27	0	3.05	4.27	6.1	0.61	1.22	3.05	0	3.05	5.49	0.61	1.22	1.83		
					End Depth	1.22	1.83	2.44	3.05	4.88	0.61	3.66	4.88	6.71	1.22	1.83	3.66	0.61	3.66	6.1	1.22	1.83	2.44		
					Date	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	29 Sep 2004	29 Sep 2004
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																				
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190																				
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43																				
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390																				
ABN	2,4-Dinitrophenol	µg/g	2	38	59																				
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15																				
ABN	2-Chlorophenol	µg/g	0.1	1.6	21																				
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66																				
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45																				
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92																				
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120																				
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09																				
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07																				
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02																				
ABN	Phenol	µg/g	0.5	9.4	46																				
CHEMISTRY	Ammonia	µg/g																							
CHEMISTRY	Bromide	µg/g																							
CHEMISTRY	Chlorite	µg/g																							
CHEMISTRY	Fluoride	µg/g	110 [c.]																						
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]																						
CHEMISTRY	Moisture, percent	%				**7.4**	**17**	**10**	**16**	**52**	**3.3**	**20**	**39**	**45**	**16**	**16**	**20**	**4.5**	**15**	**38**	**12**	**37**	**23**		
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]																						
CHEMISTRY	Nitrite (as N)	µg/g																							
Chemistry	ortho-Phosphate	µg/g																							
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**8.66**	**9.22**				**7.99**				**7.3**	**7.93**		**8.1**			**7.65**	**7.86**			
CHEMISTRY	Sulfate	µg/g																							
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g																							
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27																				
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8																				
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46																				
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9																				
GENCHEM	MOISTURE AT LIQUID LIMIT	%																							
INORGANIC	Aluminum	µg/g	26000 [c.]																						
INORGANIC	Antimony	µg/g	1.3	7.5		**1.2**	**1.6**				**0.25**				**3.2**	**0.2**		**0.2**			**0.9**	**0.2**			
INORGANIC	Arsenic	µg/g	18	18		**4.8**	**8.9**				**3.4**				**12**	**1**		**2.1**			**8.6**	**2.8**			
INORGANIC	Barium	µg/g	220	390		**100**	**130**				**22**				**110**	**11**		**17**			**200**	**94**			
INORGANIC	Beryllium	µg/g	2.5	4		**0.26**	**0.5**				**0.2**				**0.41**	**0.2**		**0.2**			**0.61**	**0.35**			
INORGANIC	Boron	µg/g	36	120																					
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**1.3**	**2.8**				**0.28**				**1.9**	**0.05**		**0.08**			**1**	**0.74**			
INORGANIC	Cadmium	µg/g	1.2	1.2		**0.8**	**0.72**				**0.34**				**0.69**	**0.1**		**0.19**			**0.62**	**0.1**			
INORGANIC	Calcium	µg/g	49000 [c.]																						
INORGANIC	Chloride (Cl)	µg/g	130 [c.]																						
INORGANIC	Chromium	µg/g	70	160		**17**	**30**				**4.1**				**62**	**3.6**		**4.5**			**18**	**25**			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		**0.2**	**0.4**				**0.2**				**1**	**0.2**		**0.2**			**0.2**	**0.2**			
INORGANIC	Cobalt	µg/g	22	22		**5.8**	**4.1**				**1.8**				**6.2**	**1.6**		**2.1**			**5.8**	**7**			
INORGANIC	Copper	µg/g	92	140		**43**	**53**				**16**				**140**	**2.6**		**12**			**30**	**19**			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02	**0.07**	**0.01**				**0.01**				**0.01**	**0.01**		**0.01**			**0.01**	**0.01**			
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**2.8**	**2.8**				**0.29**				**0.51**	**0.18**		**0.13**			**0.51**	**0.74**			
INORGANIC	Iron	µg/g	34000 [c.]																						
INORGANIC	Lead	µg/g	120	120		**120**	**280**				**110**				**150**	**3.8**		**21**			**300**	**14**			
INORGANIC	Magnesium	µg/g	15000 [c.]																						
INORGANIC	Manganese	µg/g	1400 [c.]																						
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14	**0.14**	**0.31**				**0.05**				**2.5**	**0.05**		**0.05**			**0.18**	**0.05**			
INORGANIC	Molybdenum	µg/g	2	6.9		**1**	**2.1**				**0.78**				**1.7**	**0.5**		**0.5**			**1.2**	**0.98**			
INORGANIC	Nickel	µg/g	82	100		**11**	**12**				**5**				**49**	**2.9**		**4**			**15**	**18**			
INORGANIC	Phosphorus	µg/g	1500 [c.]																						
INORGANIC	Potassium	µg/g	4900 [c.]																						
INORGANIC	Selenium	µg/g	1.5	2.4		**0.5**	**0.95**				**0.5**				**0.91**	**0.5**		**0.5**			**0.58**	**0.5**			
INORGANIC	Silver	µg/g	0.5	20		**0.2**	**0.23**				**0.2**				**0.2**	**0.2**		**0.2**			**0.2**	**0.2**			
INORGANIC	Sodium	µg/g	180 [c.]																						
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		**0.83**	**0.67**				**1.5**				**2.2**	**1.2**		**1.9**			**8.1**	**2.3**			
INORGANIC	Strontium	µg/g	77 [c.]																						
INORGANIC	Thallium	µg/g	1	1		**0.05**	**0.13**				**0.05**				**0.17**	**0.05**		**0.05**			**0.17**	**0.09**			
INORGANIC	Titanium	µg/g	4700 [c.]																						
INORGANIC	Uranium (U)	µg/g	2.5	23																					
INORGANIC	Vanadium	µg/g	86	86		**21**	**19**				**5**				**18**	**5**		**10**			**24**	**25**			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02																				
INORGANIC	Zinc	µg/g	290	340		**250**	**180**				**97**				**420**	**12**		**42**			**190**	**45**			
METAL	Zirconium	µg/g	48 [e.]																						

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	Terrapex MW101	Terrapex MW101
						Sample ID	BH 170 2-4'	BH 170 4-6'	BH 170 6-8'	BH 170 8-10'	BH170 14-16'	BH171 0-2'	BH171 10-12'	BH171 14-16'	BH171 20-22'	BH171 2-4'	BH171 4-6'	DUP E	BH172 0-2'	BH172 10-12'	BH172 18-20'	BH172 2-4'	BH172 4-6'	BH172 6-8'	MW101D	MW101I
						Start Depth	0.61	1.22	1.83	2.44	4.27	0	3.05	4.27	6.1	0.61	1.22	3.05	0	3.05	5.49	0.61	1.22	1.83		
						End Depth	1.22	1.83	2.44	3.05	4.88	0.61	3.66	4.88	6.71	1.22	1.83	3.66	0.61	3.66	6.1	1.22	1.83	2.44		
						Date	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	29 Sep 2004	29 Sep 2004
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																					
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14																					
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6																					
OCP	Hexachloroethane	µg/g	0.01	0.089	22																					
other SVOC	2-Chloroethyl Vinyl Ether	µg/g																								
other SVOC	2-Chloronaphthalene	µg/g																								
other SVOC	2-Hexanone	µg/g																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/g																								
other SVOC	4-Chlorophenyl Phenylether	µg/g																								
other SVOC	Bis (2-chloroethoxy) methane	µg/g																								
other SVOC	Butyl benzyl phthalate	µg/g																								
other SVOC	Chloroethane	µg/g																								
other SVOC	Chloromethane	µg/g																								
other SVOC	Di-N-Butylphthalate	µg/g																								
other SVOC	Di-n-octyl phthalate	µg/g																								
other SVOC	Isophorone	µg/g																								
other SVOC	Nitrobenzene	µg/g																								
other SVOC	N-Nitrosodi-N-propylamine	µg/g																								
other SVOC	N-Nitrosodiphenylamine	µg/g																								
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76																					
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76			**1.8**				**0.005**	**0.005**								**0.02**			**0.0059**		
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76			**2**				**0.0054**	**0.0058**								**0.02**			**0.005**		
PAH	Acenaphthene	µg/g	0.072	7.9	560			**0.2**				**0.01**	**0.01**								**0.04**			**0.01**		
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15			**0.1**				**0.005**	**0.02**								**0.02**			**0.005**		
PAH	Anthracene	µg/g	0.22	0.67	0.67			**0.25**				**0.01**	**0.02**								**0.02**			**0.005**		
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11			**0.46**				**0.07**	**0.05**								**0.04**			**0.01**		
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13			**0.17**				**0.08**	**0.06**								**0.02**			**0.0084**		
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78				**0.33**				**0.09**	**0.06**								**0.04**			**0.01**		
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13																					
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13			**0.4**				**0.04**	**0.04**								**0.08**			**0.02**		
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13			**0.2**				**0.03**	**0.02**								**0.04**			**0.01**		
PAH	Chrysene	µg/g	2.8	7	3.6E+11			**0.46**				**0.06**	**0.04**								**0.04**			**0.01**		
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13			**0.4**				**0.02**	**0.02**								**0.08**			**0.02**		
PAH	Fluoranthene	µg/g	0.69	0.69	40000			**0.5**				**0.15**	**0.08**								**0.03**			**0.0074**		
PAH	Fluorene	µg/g	0.19	62	62			**0.1**				**0.01**	**0.0084**								**0.02**			**0.005**		
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13			**0.4**				**0.04**	**0.04**								**0.08**			**0.02**		
PAH	Naphthalene	µg/g	0.09	0.6	200			**0.92**				**0.01**	**0.0093**								**0.02**			**0.005**		
PAH	Phenanthrene	µg/g	0.69	6.2	270			**1.9**				**0.05**	**0.04**								**0.02**			**0.0053**		
PAH	Pyrene	µg/g	1	78	2600			**0.48**				**0.11**	**0.11**								**0.03**			**0.0084**		
PCB	Aroclor 1016	µg/g																								
PCB	Aroclor 1221	µg/g																								
PCB	Aroclor 1232	µg/g																								
PCB	Aroclor 1242	µg/g																								
PCB	Aroclor 1248	µg/g																								
PCB	Aroclor 1254	µg/g																								
PCB	Aroclor 1260	µg/g																								
PCB	Aroclor 1262	µg/g																								
PCB	Aroclor 1268	µg/g																								
PCB	PCB, Total	µg/g	0.3	0.35																						
Perchlorate	Perchlorate	µg/g																								
PHC	F1 (C6-C10)	µg/g	25	55	55			**10**	**10**			**10**		**10**					**10**			**30**		**6.8**	**25.69**	
PHC	F1-BTEX	µg/g	25	55	55			**10**	**10**			**10**		**10**					**10**			**30**				
PHC	F2 (C10-C16)	µg/g	10	98	230			**180**	**10**			**10**		**10**			**10**		**10**			**51**		**856.99**	**6**	
PHC	F2-Naphth	µg/g	10	98	230																					
PHC	F3 (C16-C34)	µg/g	240	300				**3200**	**10**			**10**		**28**			**10**		**10**			**72**		0.0005 U	**7**	
PHC	F3-PAH	µg/g	240	300																						
PHC	F4 (C34-C50)	µg/g	120	2800				**1600**	**10**			**10**		**10**			**10**		**10**			**10**		0.0005 U	**110**	
PHC	F4G-SG	µg/g	120	2800				**7900**																		
PHC	**Chrom. to baseline at nC5No**	None						**No**	Yes			Yes		Yes			Yes		Yes			Yes				
PHC	Total Hydrocarbons (C6-C50)	µg/g																								
SVOC	Hexachlorocyclopentadiene	µg/g																								
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37					**0.002**																**0.28**
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8					**0.002**																**8.39**
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48					**0.002**																**9.39**
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120					**0.002**																0.19 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600					**0.002**																**3.68**
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11					**0.002**																**0**
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86					**0.002**																**17600**
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60					**0.002**																**0.11**
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180					**0.002**																**1.41**
VOC	1,2-Dichloroethene (Total)	µg/g																								

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH170	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH171	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	SLR BH172	Terrapex MW101	Terrapex MW101
					Sample ID	BH 170 2-4'	BH 170 4-6'	BH 170 6-8'	BH 170 8-10'	BH170 14-16'	BH171 0-2'	BH171 10-12'	BH171 14-16'	BH171 20-22'	BH171 2-4'	BH171 4-6'	DUP E	BH172 0-2'	BH172 10-12'	BH172 18-20'	BH172 2-4'	BH172 4-6'	BH172 6-8'	MW101D	MW101I
					Start Depth	0.61	1.22	1.83	2.44	4.27	0	3.05	4.27	6.1	0.61	1.22	3.05	0	3.05	5.49	0.61	1.22	1.83		
					End Depth	1.22	1.83	2.44	3.05	4.88	0.61	3.66	4.88	6.71	1.22	1.83	3.66	0.61	3.66	6.1	1.22	1.83	2.44		
					Date	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	06 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	10 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	09 Oct 2008	29 Sep 2004	29 Sep 2004
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**																			
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76					**0.002**														0.25 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59					**0.002**														0.19 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05																				0.19 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59					**0.002**														**0.002**
VOC	2-Butanone	µg/g	0.5	16	230					**0.09**														**8550**
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150					**0.03**														**12600**
VOC	Acetone	µg/g	0.5	16	16					**0.5**														1 U
VOC	Benzene	µg/g	0.02	0.21	14			**0.02**	**0.02**	**0.004**		**0.02**		**0.02**					**0.02**			**0.26**		4.99 U	35900 U
VOC	Bromodichloromethane	µg/g	0.05	13	50					**0.002**														**0.29**
VOC	Bromoform	µg/g	0.05	0.27	21					**0.002**														**0.003**
VOC	Bromomethane	µg/g	0.05	0.05	1.4					**0.003**														0.04 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3					**0.002**														**0.09**
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4					**0.002**														0.25 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48					**0.002**														**81599.99**
VOC	Chloroform	µg/g	0.05	0.05	9.5					**0.002**														0.19 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130					**0.002**														**2.9**
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05						**0.002**														
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16																			
VOC	Dichloromethane	µg/g	0.05	0.1	7.4					**0.003**														**12800**
VOC	Ethylbenzene	µg/g	0.05	2	17			**0.02**	**0.02**	**0.002**		**0.02**		**0.02**					**0.02**			**0.02**		4.99 U	16799.99 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220					**0.002**														**13000**
VOC	n-Hexane	µg/g	0.05	2.8	54																			
VOC	Styrene	µg/g	0.05	0.7	66					**0.002**														**13500**
VOC	Tetrachloroethene	µg/g	0.05	0.28	18					**0.002**														**13300**
VOC	Toluene	µg/g	0.2	2.3	68			**0.02**	**0.02**	**0.009**		**0.02**		**0.02**					**0.02**			**0.05**		0.0005 U	**71500**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220					**0.002**														**60099.99**
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05						**0.002**														
VOC	Trichloroethylene	µg/g	0.05	0.061	300					**0.002**														**13300**
VOC	Trichlorofluoromethane	µg/g	0.25	4																				**12500**
VOC	Vinyl Chloride	µg/g	0.02	0.02	270					**0.002**														**8540**
VOC	Xylene, o	µg/g	0.05	3.1	26			**0.02**	**0.02**	**0.002**		**0.02**		**0.02**					**0.02**			**0.05**			
VOC	Xylenes, m & p	µg/g	0.05	3.1	26			**0.04**	**0.04**	**0.007**		**0.04**		**0.04**					**0.04**			**0.11**			
VOC	Xylenes, Total	µg/g	0.05	3.1	26			**0.04**	**0.04**	**0.007**		**0.04**		**0.04**					**0.04**			**0.16**		0.0005 U	116000 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	Terrapex MW101	TP1	TP1	TP1	TP2	TP2	TP2	TP3	TP3
						Sample ID	MW101S	S-11102463-121015-KMV-601	S-11102463-121015-KMV-602	S-11102463-121015-KMV-603	S-11102463-121015-KMV-604	S-11102463-121015-KMV-605	S-11102463-121015-KMV-606	S-11102463-121115-KMV-609	S-11102463-121115-KMV-610
						Start Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
						End Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
						Date	29 Sep 2004	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**										
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190										
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43										
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390										
ABN	2,4-Dinitrophenol	µg/g	2	38	59										
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15										
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15										
ABN	2-Chlorophenol	µg/g	0.1	1.6	21										
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66										
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45										
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92										
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120										
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09										
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07										
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02										
ABN	Phenol	µg/g	0.5	9.4	46										
CHEMISTRY	Ammonia	µg/g													
CHEMISTRY	Bromide	µg/g													
CHEMISTRY	Chlorite	µg/g													
CHEMISTRY	Fluoride	µg/g	110 [c.]												
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]												
CHEMISTRY	Moisture, percent	%					**11.7**	**41.3**	**23.7**	**9.04**	**9.9**	**25.9**	**2.63**	**8.16**	
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]												
CHEMISTRY	Nitrite (as N)	µg/g													
Chemistry	ortho-Phosphate	µg/g													
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]				**7.57**	**6.88**	**7.34**	**7.51**	**7.63**	**7.51**	**7.69**	**7.81**	
CHEMISTRY	Sulfate	µg/g													
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g													
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27										
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8										
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46										
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9										
GENCHEM	MOISTURE AT LIQUID LIMIT	%													
INORGANIC	Aluminum	µg/g	26000 [c.]												
INORGANIC	Antimony	µg/g	1.3	7.5		**669**									
INORGANIC	Arsenic	µg/g	18	18		**92**									
INORGANIC	Barium	µg/g	220	390		**50**									
INORGANIC	Beryllium	µg/g	2.5	4		**50**									
INORGANIC	Boron	µg/g	36	120			5 U	**5.1**	**5.3**	5 U	5 U	5 U	5 U	5 U	
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5			**1.04**	**0.68**	**0.66**	**0.46**	**0.23**	**0.35**	**0.3**	**0.15**	
INORGANIC	Cadmium	µg/g	1.2	1.2		**50**									
INORGANIC	Calcium	µg/g	49000 [c.]												
INORGANIC	Chloride (Cl)	µg/g	130 [c.]												
INORGANIC	Chromium	µg/g	70	160		25 U									
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8			0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
INORGANIC	Cobalt	µg/g	22	22		**55**									
INORGANIC	Copper	µg/g	92	140		9.99 U									
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02										
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7			**0.446**	**3.63**	**0.753**	**0.206**	**0.238**	**0.447**	**0.477**	**0.232**	
INORGANIC	Iron	µg/g	34000 [c.]												
INORGANIC	Lead	µg/g	120	120		**15**									
INORGANIC	Magnesium	µg/g	15000 [c.]												
INORGANIC	Manganese	µg/g	1400 [c.]												
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14										
INORGANIC	Molybdenum	µg/g	2	6.9		250 U									
INORGANIC	Nickel	µg/g	82	100		59.99 U									
INORGANIC	Phosphorus	µg/g	1500 [c.]												
INORGANIC	Potassium	µg/g	4900 [c.]												
INORGANIC	Selenium	µg/g	1.5	2.4		270 U									
INORGANIC	Silver	µg/g	0.5	20		39.99 U									
INORGANIC	Sodium	µg/g	180 [c.]												
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000			**0.61**	**0.28**	**0.3**	**0.39**		**0.32**	**0.79**		
INORGANIC	Strontium	µg/g	77 [c.]												
INORGANIC	Thallium	µg/g	1	1											
INORGANIC	Titanium	µg/g	4700 [c.]												
INORGANIC	Uranium (U)	µg/g	2.5	23			1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
INORGANIC	Vanadium	µg/g	86	86		**59.99**									
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02		**0.052**	**461**	**0.053**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
INORGANIC	Zinc	µg/g	290	340		75 U									
METAL	Zirconium	µg/g	48 [e.]												

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	Terrapex MW101	TP1	TP1	TP1	TP2	TP2	TP2	TP3	TP3
						Sample ID	MW101S	S-11102463-121015-KMV-601	S-11102463-121015-KMV-602	S-11102463-121015-KMV-603	S-11102463-121015-KMV-604	S-11102463-121015-KMV-605	S-11102463-121015-KMV-606	S-11102463-121115-KMV-609	S-11102463-121115-KMV-610
						Start Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
						End Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
						Date	29 Sep 2004	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**										
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14										
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6										
OCP	Hexachloroethane	µg/g	0.01	0.089	22										
other SVOC	2-Chloroethyl Vinyl Ether	µg/g													
other SVOC	2-Chloronaphthalene	µg/g													
other SVOC	2-Hexanone	µg/g													
other SVOC	4-Bromophenyl Phenyl Ether	µg/g													
other SVOC	4-Chlorophenyl Phenylether	µg/g													
other SVOC	Bis (2-chloroethoxy) methane	µg/g													
other SVOC	Butyl benzyl phthalate	µg/g													
other SVOC	Chloroethane	µg/g													
other SVOC	Chloromethane	µg/g													
other SVOC	Di-N-Butylphthalate	µg/g													
other SVOC	Di-n-octyl phthalate	µg/g													
other SVOC	Isophorone	µg/g													
other SVOC	Nitrobenzene	µg/g													
other SVOC	N-Nitrosodi-N-propylamine	µg/g													
other SVOC	N-Nitrosodiphenylamine	µg/g													
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76		**2.06**	**1.52**	**4.57**	**0.872**	**18.6**	**17**	**4.56**	**38.4**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**8**	**0.887 D**	**0.76 D**	**3.74**	**0.675**	**17 D**	**16.3 D**	**2**	**37.7 D**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**57**	**1.18 D**	**0.76 D**	**0.833**	**0.197**	**1.57 D**	**0.676 D**	**2.56**	
PAH	Acenaphthene	µg/g	0.072	7.9	560	**46.99**	**0.27 D**	**4.6 D**	**3.6**	**0.108**	**2.11 D**	**2.5 D**	**0.066**	**1.98**
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	**8.99**	**0.95 D**	**7.1 D**	**1**	0.05 U	0.3 UQ	**0.28 D**	0.05 U	**0.562**
PAH	Anthracene	µg/g	0.22	0.67	0.67	**4.99**	**1.14 D**	**15.1 D**	**5.5**	0.05 U	**0.54 D**	**0.72 D**	0.05 U	**0.547**
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.002**	**5.41 D**	**43.5 D**	**5.5**	**0.115**	**0.57 D**		0.05 U	**0.091**
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	0.0005 U	**8.76 D**	**47.4 D**	**4.9**	**0.121**	**0.41 D**	**0.59 D**	**0.053**	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78										
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	0.0005 U	**9.28 D**	**57.9 D**	**4.21**	**0.141**	**0.42 D**	**0.49 D**	**0.072**	**0.056**
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	**0.004**	**8.73 D**	**40.2 D**	**3.84**	**0.277**	**0.41 D**	**0.46 D**	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	9.99 U	**3.58 D**	**20.1 D**	**1.27**	**0.052**	**0.15 D**	**0.15 D**	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**25**	**5.18 D**	**45.3 D**	**7.24**	**0.162**	**0.71 D**	**0.99 D**	**0.078**	**0.134**
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	9.99 U	**1.37 D**	**7.6 D**	**0.773**	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	9.99 U	**7.78 D**	**84.3 D**	**5.6**	**0.203**	**1.03 D**	**1.05 D**	**0.09**	**0.21**
PAH	Fluorene	µg/g	0.19	62	62	9.99 U	**0.35 D**	**15 D**	**6.71**	**0.058**	**1.32 D**	**1.66 D**	**0.102**	**2.23**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	**25**	**8 D**	**42.7 D**	**3.14**	**0.091**	**0.23 D**	**0.35 D**	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	**59.99**	**0.79 D**	**1.4 D**	**0.632**				**1.13**	
PAH	Phenanthrene	µg/g	0.69	6.2	270	9.99 U	**3.7 D**	**5.4 D**	**4.25**	**0.185**	**3.63 D**	**4.67 D**	**0.202**	**5.25**
PAH	Pyrene	µg/g	1	78	2600	**59.99**	**7.57 D**	**97.7 D**	**16.7 D**	**0.313**	**1.78 D**	**1.85 D**	**0.096**	**0.519**
PCB	Aroclor 1016	µg/g												
PCB	Aroclor 1221	µg/g												
PCB	Aroclor 1232	µg/g												
PCB	Aroclor 1242	µg/g												
PCB	Aroclor 1248	µg/g												
PCB	Aroclor 1254	µg/g												
PCB	Aroclor 1260	µg/g												
PCB	Aroclor 1262	µg/g												
PCB	Aroclor 1268	µg/g												
PCB	PCB, Total	µg/g	0.3	0.35		9.99 U								
Perchlorate	Perchlorate	µg/g												
PHC	F1 (C6-C10)	µg/g	25	55	55		**56**	**5950**	**2020**	**1360**	**14700**	**8770**	**186**	**11800**
PHC	F1-BTEX	µg/g	25	55	55									
PHC	F2 (C10-C16)	µg/g	10	98	230		**56 D**	**5950 D**	**2020 D**	**1360**	**14700 D**	**8770 D**	**186**	**11800 D**
PHC	F2-Naphth	µg/g	10	98	230		**56**	**5950**	**2020**	**1360**	**14700**	**8770**	**185**	**11800**
PHC	F3 (C16-C34)	µg/g	240	300			**1410 D**	**38300 D**	**10700 D**	**1020**	**4130 D**	**2890 D**	**175**	**2830 D**
PHC	F3-PAH	µg/g	240	300			**1360**	**37900**	**10700**	**1020**	**4120**	**2880**	**175**	**2820**
PHC	F4 (C34-C50)	µg/g	120	2800			**1270 D**	**18700 D**	**5600 D**	**584**	**1360 D**	**930 D**	**591**	250 U
PHC	F4G-SG	µg/g	120	2800			**2620**	**43800**	**12500**				**1710**	
PHC	**Chrom. to baseline at nC5No**	None					No U	No U	No U	Yes	Yes	Yes	No U	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g					**2760**	**63000**	**18600**	**3440**	**26600**	**15300**	**1050**	**17000**
SVOC	Hexachlorocyclopentadiene	µg/g												
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48		0.1 U	**0.21 D**	1.5 U	11 U	100 U	56 U	0.27 U	9.7 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120		0.1 U	0.1 U	0.7 U	0.4 U	4.6 U	3.4 U	0.2 U	3 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86		0.1 U	0.1 U	1 U	0.8 U	7.2 U	3.6 U	0.2 U	4.8 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,2-Dichloroethene (Total)	µg/g												

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	Terrapex MW101	TP1	TP1	TP1	TP2	TP2	TP2	TP3	TP3
					Sample ID	MW101S	S-11102463-121015-KMV-601	S-11102463-121015-KMV-602	S-11102463-121015-KMV-603	S-11102463-121015-KMV-604	S-11102463-121015-KMV-605	S-11102463-121015-KMV-606	S-11102463-121115-KMV-609	S-11102463-121115-KMV-610
					Start Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
					End Depth		0.76	1.83	2.44	0.91	1.52	1.98	0.91	1.98
					Date	29 Sep 2004	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	10 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**									
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05			0.085 U	0.085 U	0.34 U	0.34 U	0.34 U	0.34 U	0.17 U	0.17 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	2-Butanone	µg/g	0.5	16	230		1 U	1 U	4 U	4 U	4 U	4 U	2 U	2 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150		1 U	1 U	4 U	4 U	4 U	4 U	2 U	2 U
VOC	Acetone	µg/g	0.5	16	16		1 U	1 U	4 U	4 U	4 U	4 U	2 U	2 U
VOC	Benzene	µg/g	0.02	0.21	14		**0.955 D**	**0.5 D**	**1.05 D**	**0.326 D**	**1.49 D**	**1.05 D**	**3.12 D**	**2.92 D**
VOC	Bromodichloromethane	µg/g	0.05	13	50		0.14 U	0.5 U	0.4 U	0.4 U	1.1 U	0.4 U	0.2 U	0.28 U
VOC	Bromoform	µg/g	0.05	0.27	21		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4		0.1 U	0.1 U	0.4 U	0.4 U	0.5 U	0.4 U	0.2 U	0.2 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48		0.1 U	0.1 U	0.4 U	0.4 U	3.5 U	1.9 U	0.2 U	1.1 U
VOC	Chloroform	µg/g	0.05	0.05	9.5		0.1 U	0.2 U	0.9 U	0.4 U	2.4 U	1.9 U	0.2 U	2.6 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05			0.06 U	0.06 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Ethylbenzene	µg/g	0.05	2	17		**0.305 D**	**0.164 D**	**0.23 D**	**0.18 D**	**2.9 D**	**0.7 D**	**2.81 D**	**5.41 D**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	n-Hexane	µg/g	0.05	2.8	54		**0.52 D**	0.1 U	**0.59 D**	**1.72 D**	**15.8 D**	**7.01 D**	**4.81 D**	**18.7 D**
VOC	Styrene	µg/g	0.05	0.7	66		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Toluene	µg/g	0.2	2.3	68		**2.66 D**	**0.21 D**	**0.88 D**	0.64 U		0.64 U	**0.96 D**	
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220		0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05			0.06 U	0.06 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300		0.02 U	0.02 U	0.08 U	0.08 U	0.08 U	0.08 U	0.04 U	0.04 U
VOC	Trichlorofluoromethane	µg/g	0.25	4			0.1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270		0.04 U	0.04 U	0.16 U	0.16 U	0.16 U	0.16 U	0.08 U	0.08 U
VOC	Xylene, o	µg/g	0.05	3.1	26		**0.834 D**	**0.107 D**	**0.42 D**	0.16 U	1.6 U	0.98 U	**0.783 D**	
VOC	Xylenes, m & p	µg/g	0.05	3.1	26		**2.48 D**	**0.321 D**	**0.91 D**	0.24 U	**0.94 D**	**0.48 D**	**3.19 D**	**1.16 D**
VOC	Xylenes, Total	µg/g	0.05	3.1	26		**3.31**	**0.428**	**1.32**	0.29 U	1.6 U	1 U	**3.97**	**2.63**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	TP3	TP3	TP4	TP4	TP4	TP4	TP5	TP5	TP5
					Sample ID	S-11102463-121115-KMV-611	S-11102463-121115-KMV-612	S-11102463-121115-KMV-613	S-11102463-121115-KMV-614	S-11102463-121115-KMV-615	S-11102463-121115-KMV-616	S-11102463-121115-KMV-617	S-11102463-121115-KMV-618	S-11102463-121115-KMV-619
					Start Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
					End Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
					Date	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**									
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190									
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43									
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390									
ABN	2,4-Dinitrophenol	µg/g	2	38	59									
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15									
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15									
ABN	2-Chlorophenol	µg/g	0.1	1.6	21									
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66									
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45									
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92									
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120									
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09									
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07									
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02									
ABN	Phenol	µg/g	0.5	9.4	46									
CHEMISTRY	Ammonia	µg/g												
CHEMISTRY	Bromide	µg/g												
CHEMISTRY	Chlorite	µg/g												
CHEMISTRY	Fluoride	µg/g	110 [c.]											
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]											
CHEMISTRY	Moisture, percent	%				**7.69**	**9.11**	**6.91**	**7.34**	**12.2**	**67.3**	**9.22**	**6.48**	**4.51**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]											
CHEMISTRY	Nitrite (as N)	µg/g												
Chemistry	ortho-Phosphate	µg/g												
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.78**	**7.77**	**7.82**	**8.21**	**7.58**	**7.58**	**7.54**	**7.91**	**7.83**
CHEMISTRY	Sulfate	µg/g												
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g												
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27									
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8									
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46									
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9									
GENCHEM	MOISTURE AT LIQUID LIMIT	%												
INORGANIC	Aluminum	µg/g	26000 [c.]											
INORGANIC	Antimony	µg/g	1.3	7.5										
INORGANIC	Arsenic	µg/g	18	18										
INORGANIC	Barium	µg/g	220	390										
INORGANIC	Beryllium	µg/g	2.5	4										
INORGANIC	Boron	µg/g	36	120		5 U	5 U	5 U	5 U	**10.7**	**10.3**	**6.9**	5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**0.11**	0.1 U	**0.15**	**0.14**	**0.47**	**1.35**	**0.27**	**0.33**	**0.23**
INORGANIC	Cadmium	µg/g	1.2	1.2										
INORGANIC	Calcium	µg/g	49000 [c.]											
INORGANIC	Chloride (Cl)	µg/g	130 [c.]											
INORGANIC	Chromium	µg/g	70	160										
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U	0.2 U	**0.29**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22										
INORGANIC	Copper	µg/g	92	140										
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02									
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.119**	**0.0968**	**0.152**	**0.192**	**0.295**	**1.48**	**0.345**	**0.269**	**0.158**
INORGANIC	Iron	µg/g	34000 [c.]											
INORGANIC	Lead	µg/g	120	120										
INORGANIC	Magnesium	µg/g	15000 [c.]											
INORGANIC	Manganese	µg/g	1400 [c.]											
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14									
INORGANIC	Molybdenum	µg/g	2	6.9										
INORGANIC	Nickel	µg/g	82	100										
INORGANIC	Phosphorus	µg/g	1500 [c.]											
INORGANIC	Potassium	µg/g	4900 [c.]											
INORGANIC	Selenium	µg/g	1.5	2.4										
INORGANIC	Silver	µg/g	0.5	20										
INORGANIC	Sodium	µg/g	180 [c.]											
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000					**0.29**	**0.34**	**2.79**	**2.23**	**1.21**	**0.36**
INORGANIC	Strontium	µg/g	77 [c.]											
INORGANIC	Thallium	µg/g	1	1										
INORGANIC	Titanium	µg/g	4700 [c.]											
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
INORGANIC	Vanadium	µg/g	86	86										
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340										
METAL	Zirconium	µg/g	48 [e.]											

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	TP3	TP3	TP4	TP4	TP4	TP4	TP5	TP5	TP5
						Sample ID	S-11102463-121115-KMV-611	S-11102463-121115-KMV-612	S-11102463-121115-KMV-613	S-11102463-121115-KMV-614	S-11102463-121115-KMV-615	S-11102463-121115-KMV-616	S-11102463-121115-KMV-617	S-11102463-121115-KMV-618	S-11102463-121115-KMV-619
						Start Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
						End Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
						Date	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**										
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14										
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6										
OCP	Hexachloroethane	µg/g	0.01	0.089	22										
other SVOC	2-Chloroethyl Vinyl Ether	µg/g													
other SVOC	2-Chloronaphthalene	µg/g													
other SVOC	2-Hexanone	µg/g													
other SVOC	4-Bromophenyl Phenyl Ether	µg/g													
other SVOC	4-Chlorophenyl Phenylether	µg/g													
other SVOC	Bis (2-chloroethoxy) methane	µg/g													
other SVOC	Butyl benzyl phthalate	µg/g													
other SVOC	Chloroethane	µg/g													
other SVOC	Chloromethane	µg/g													
other SVOC	Di-N-Butylphthalate	µg/g													
other SVOC	Di-n-octyl phthalate	µg/g													
other SVOC	Isophorone	µg/g													
other SVOC	Nitrobenzene	µg/g													
other SVOC	N-Nitrosodi-N-propylamine	µg/g													
other SVOC	N-Nitrosodiphenylamine	µg/g													
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**74.6**	**67.9**	**4.94**	**10.2**	**1.04**	**5.33**	**0.837**	**144**	**116**
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**73.7 D**	**67.9 D**	**1.46**	**2.71 D**	**0.906**	**4.15 D**	**0.428**	**59 D**	**47.7 D**
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	**0.92 D**	0.6 U	**3.48**	**7.49 D**	**0.131**	**1.18 D**	**0.409**	**84.5 D**	**68.6 D**
PAH	Acenaphthene	µg/g	0.072	7.9	560	**2.7 D**	**2.6 D**	0.3 UQ	**0.46 D**	**0.157**	**79 D**	0.06 UQ	2.5 U	2 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	1 U	1 U	0.15 UQ	**0.11 D**	0.05 U	1 U	**0.065**	1 U	1 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	1 U	1 U	**0.886**	**1.87 D**	0.05 U	**3.2 D**	**0.141**	1 U	1 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	1 U	1 U	**1.44**	**2.77 D**	0.05 U	1 U	**0.241**	1 U	1 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	1 U	1 U	**1.26**	**1.99 D**	**0.085**	**1 D**	**0.374**	1 U	1 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78										
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	1 U	1 U	**0.795**	**1.02 D**	**0.08**	**1.3 D**	**0.484**	1 U	1 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	1 U	1 U	**2.7**	**2.58 D**	**0.099**	1 U	**0.537**	1 U	1 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	1 U	1 U	**0.206**	**0.27 D**	0.05 U	1 U	**0.118**	1 U	1 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	1 U	1 U	**2.01**	**3.83 D**	**0.054**	**1.2 D**	**0.446**	1 U	1 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	1 U	1 U	**0.184**	**0.28 D**	0.05 U	1 U	**0.069**	1 U	1 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	1 U	1 U	**1.11**	**1.68 D**	0.05 U	**2.8 D**	**0.356**	1 U	1 U
PAH	Fluorene	µg/g	0.19	62	62	**3.4 D**	**3 D**			0.05 U	**16.8 D**	**0.117**	**2.6 D**	**2.1 D**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	1 U	1 U	**0.506**	**0.7 D**	**0.094**	1 U	**0.298**	1 U	1 U
PAH	Naphthalene	µg/g	0.09	0.6	200		**2.7 D**	**0.845**	**1.04 D**	**0.568**	**4.2 D**	**0.244**	**9.8 D**	**3.5 D**
PAH	Phenanthrene	µg/g	0.69	6.2	270	**5.5 D**	**4.9 D**	**7.28**	**17.7 D**	**0.073**	**20.7 D**	**0.48**	**4.6 D**	**3.6 D**
PAH	Pyrene	µg/g	1	78	2600	1 U	1 U	**3.94**	**7.68 D**	0.05 U	**2.8 D**	**0.865**	**1.2 D**	1 U
PCB	Aroclor 1016	µg/g												
PCB	Aroclor 1221	µg/g												
PCB	Aroclor 1232	µg/g												
PCB	Aroclor 1242	µg/g												
PCB	Aroclor 1248	µg/g												
PCB	Aroclor 1254	µg/g												
PCB	Aroclor 1260	µg/g												
PCB	Aroclor 1262	µg/g												
PCB	Aroclor 1268	µg/g												
PCB	PCB, Total	µg/g	0.3	0.35										
Perchlorate	Perchlorate	µg/g												
PHC	F1 (C6-C10)	µg/g	25	55	55	**11600**	**8040**	60 U	114 U	20 U	**30.3**	**206**	**4630**	**4420**
PHC	F1-BTEX	µg/g	25	55	55									
PHC	F2 (C10-C16)	µg/g	10	98	230	**11600 D**	**8040**	**60**	**114 D**	**20**		**182 D**	**4630**	**4420**
PHC	F2-Naphth	µg/g	10	98	230	**11600**	**8040**	**59**	**113**	**19**	**890**	**182**	**4620**	**4420**
PHC	F3 (C16-C34)	µg/g	240	300		**2850 D**	**2110**	**1380**	**2290 D**	**54**		**2200 D**	**6520**	**6050**
PHC	F3-PAH	µg/g	240	300		**2840**	**2100**	**1360**	**2260**	**53**	**3640**	**2190**	**6520**	**6040**
PHC	F4 (C34-C50)	µg/g	120	2800		250 U	**101**	**854**	**1440 D**	50 U		**1370 D**	**1190**	**1100**
PHC	F4G-SG	µg/g	120	2800				**1600**	**2680**			**3300**		
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes	No U	No U	Yes	Yes	No U	Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**15800**	**11400**	**2290**	**3840**	**73**	**4590**	**3950**	**15800**	**14700**
SVOC	Hexachlorocyclopentadiene	µg/g												
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	11 U	9.8 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	9 U	2.5 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	2.8 U	2.5 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	7.8 U	2.6 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.28 U	0.2 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	4.2 U	3.4 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	14 U	8 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.54 UQ	0.24 UQ
VOC	1,2-Dichloroethene (Total)	µg/g												

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

						Location	TP3	TP3	TP4	TP4	TP4	TP4	TP5	TP5	TP5
						Sample ID	S-11102463-121115-KMV-611	S-11102463-121115-KMV-612	S-11102463-121115-KMV-613	S-11102463-121115-KMV-614	S-11102463-121115-KMV-615	S-11102463-121115-KMV-616	S-11102463-121115-KMV-617	S-11102463-121115-KMV-618	S-11102463-121115-KMV-619
						Start Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
						End Depth	1.98	2.44	0.76	1.37	1.98	2.44	0.46	1.22	2.44
						Date	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**										
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.38 U	0.2 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.17 U	0.17 U	0.042 U	0.042 U	0.042 U	0.085 U	0.34 U	0.17 U	0.17 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	2-Butanone	µg/g	0.5	16	230	2 U	2 U	0.5 U	0.5 U	0.5 U	1 U	4 U	3.4 U	2 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	2 U	2 U	0.5 U	0.5 U	0.5 U	1 U	4 U	2 U	2 U
VOC	Acetone	µg/g	0.5	16	16	2 U	2 U	0.5 U	0.5 U	0.5 U	**1.4 D**	4 U	**3.7 D**	2 U
VOC	Benzene	µg/g	0.02	0.21	14	**2.68 D**	**2.18 D**	**0.0109**	**0.0367**	**0.093**	**2.88 D**	**0.988 D**	**2.31 D**	**0.968 D**
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	**0.14 D**	0.4 U	0.48 U	0.2 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	1.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	2.1 U	1.6 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	3.5 U	2.8 U	0.05 U	0.05 U	0.05 U	0.1 U	1.4 U	4 U	2.1 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.46 U	0.2 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.12 U	0.12 U	0.03 U	0.03 U	0.03 U	0.06 U	0.24 U	0.12 U	0.12 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Ethylbenzene	µg/g	0.05	2	17	**4.43 D**	**2.34 D**	**0.019**	**0.051**	0.018 U	**0.446 D**	**0.66 D**	**28.3 D**	**13.3 D**
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	n-Hexane	µg/g	0.05	2.8	54	**13.7 D**	**15.6 D**	0.05 U	**0.112**	0.05 U	0.1 U	**9.88 D**	**57.1 D**	**21.9 D**
VOC	Styrene	µg/g	0.05	0.7	66	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Toluene	µg/g	0.2	2.3	68	**0.6 D**		0.08 U	**0.283**	0.08 U	0.16 U	**1.14 D**	**4.47 D**	**2.06 D**
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.12 U	0.12 U	0.03 U	0.03 U	0.03 U	0.06 U	0.24 U	0.12 U	0.12 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	0.04 U	0.04 U	0.01 U	0.01 U	0.01 U	0.02 U	0.08 U	0.04 U	0.04 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.2 U	0.2 U	0.05 U	0.05 U	0.05 U	0.1 U	0.4 U	0.2 U	0.2 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.08 U	0.08 U	0.02 U	0.02 U	0.02 U	0.04 U	0.16 U	0.08 U	0.08 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**1.14 D**		**0.061**	**0.241**	0.02 U	**0.114 D**	**1.05 D**	**5.88 D**	**2.96 D**
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	**1.31 D**	**0.51 D**	**0.069**	**0.482**	0.03 U	**0.214 D**	**2.18 D**	**68.9 D**	**32.4 D**
VOC	Xylenes, Total	µg/g	0.05	3.1	26	**2.45**	**1.32**	**0.13**	**0.724**	0.05 U	**0.327**	**3.24**	**74.7**	**35.3**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	TP6	TP6
					Sample ID	S-11102463-121015-KMV-607	S-11102463-121015-KMV-608
					Start Depth	0.91	1.83
					End Depth	0.91	1.83
					Date	10 Dec 2015	10 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**		
ABN	1,1'-Biphenyl	µg/g	0.05	0.31	190		
ABN	1,2,4-Trichlorobenzene	µg/g	0.05	0.36	43		
ABN	2,4-Dimethylphenol	µg/g	0.2	390	390		
ABN	2,4-Dinitrophenol	µg/g	2	38	59		
ABN	2,4-Dinitrotoluene	µg/g	0.5	0.92	15		
ABN	2,6-Dinitrotoluene	µg/g	0.5	0.92	15		
ABN	2-Chlorophenol	µg/g	0.1	1.6	21		
ABN	3,3`-Dichlorobenzidine	µg/g	1	1	66		
ABN	4-Chloroaniline	µg/g	0.5	0.5	0.45		
ABN	Bis (2-chloroethyl) ether	µg/g	0.5	0.5	92		
ABN	bis (2-Chloroisopropyl) ether	µg/g	0.5	0.67	120		
ABN	Bis (2-ethylhexyl) phthalate	µg/g	5	5	2.50E+09		
ABN	Diethylphthalate	µg/g	0.5	0.5	0.07		
ABN	Dimethylphthalate	µg/g	0.5	0.5	0.02		
ABN	Phenol	µg/g	0.5	9.4	46		
CHEMISTRY	Ammonia	µg/g					
CHEMISTRY	Bromide	µg/g					
CHEMISTRY	Chlorite	µg/g					
CHEMISTRY	Fluoride	µg/g	110 [c.]				
CHEMISTRY	Lab pH	pH UNITS	5 - 9; 5 - 11 [d.]				
CHEMISTRY	Moisture, percent	%				**15.3**	**17.7**
CHEMISTRY	Nitrate (as N)	µg/g	44 [c.]				
CHEMISTRY	Nitrite (as N)	µg/g					
Chemistry	ortho-Phosphate	µg/g					
CHEMISTRY	pH	pH UNITS	5 - 9; 5 - 11 [d.]			**7.6**	**7.8**
CHEMISTRY	Sulfate	µg/g					
CHEMISTRY	Total Kjeldahl Nitrogen	µg/g					
CP	2,4,5-Trichlorophenol	µg/g	0.1	4.4	27		
CP	2,4,6-Trichlorophenol	µg/g	0.1	3.8	3.8		
CP	2,4-Dichlorophenol	µg/g	0.1	1.7	46		
CP	Pentachlorophenol	µg/g	0.1	0.1	2.9		
GENCHEM	MOISTURE AT LIQUID LIMIT	%					
INORGANIC	Aluminum	µg/g	26000 [c.]				
INORGANIC	Antimony	µg/g	1.3	7.5			
INORGANIC	Arsenic	µg/g	18	18			
INORGANIC	Barium	µg/g	220	390			
INORGANIC	Beryllium	µg/g	2.5	4			
INORGANIC	Boron	µg/g	36	120		5 U	5 U
INORGANIC	Boron (hot water extractable)	µg/g	1.5	1.5		**1.14**	**0.45**
INORGANIC	Cadmium	µg/g	1.2	1.2			
INORGANIC	Calcium	µg/g	49000 [c.]				
INORGANIC	Chloride (Cl)	µg/g	130 [c.]				
INORGANIC	Chromium	µg/g	70	160			
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/g	0.66	8		0.2 U	0.2 U
INORGANIC	Cobalt	µg/g	22	22			
INORGANIC	Copper	µg/g	92	140			
INORGANIC	Cyanide	µg/g	0.051	0.051	0.02		
INORGANIC	Electrical Conductivity	mS/cm	0.7	0.7		**0.323**	**0.466**
INORGANIC	Iron	µg/g	34000 [c.]				
INORGANIC	Lead	µg/g	120	120			
INORGANIC	Magnesium	µg/g	15000 [c.]				
INORGANIC	Manganese	µg/g	1400 [c.]				
INORGANIC	Mercury	µg/g	0.27	0.27	1.2E+14		
INORGANIC	Molybdenum	µg/g	2	6.9			
INORGANIC	Nickel	µg/g	82	100			
INORGANIC	Phosphorus	µg/g	1500 [c.]				
INORGANIC	Potassium	µg/g	4900 [c.]				
INORGANIC	Selenium	µg/g	1.5	2.4			
INORGANIC	Silver	µg/g	0.5	20			
INORGANIC	Sodium	µg/g	180 [c.]				
INORGANIC	Sodium Absorption Ratio	None	1000000	1000000		0.1 U	**1.2**
INORGANIC	Strontium	µg/g	77 [c.]				
INORGANIC	Thallium	µg/g	1	1			
INORGANIC	Titanium	µg/g	4700 [c.]				
INORGANIC	Uranium (U)	µg/g	2.5	23		1 U	1 U
INORGANIC	Vanadium	µg/g	86	86			
INORGANIC	WAD Cyanide	µg/g	0.05	0.05	0.02	0.05 U	0.05 U
INORGANIC	Zinc	µg/g	290	340			
METAL	Zirconium	µg/g	48 [e.]				

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	TP6	TP6
					Sample ID	S-11102463-121015-KMV-607	S-11102463-121015-KMV-608
					Start Depth	0.91	1.83
					End Depth	0.91	1.83
					Date	10 Dec 2015	10 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**		
OCP	Hexachlorobenzene	µg/g	0.02	0.52	14		
OCP	Hexachlorobutadiene	µg/g	0.01	0.012	1.6		
OCP	Hexachloroethane	µg/g	0.01	0.089	22		
other SVOC	2-Chloroethyl Vinyl Ether	µg/g					
other SVOC	2-Chloronaphthalene	µg/g					
other SVOC	2-Hexanone	µg/g					
other SVOC	4-Bromophenyl Phenyl Ether	µg/g					
other SVOC	4-Chlorophenyl Phenylether	µg/g					
other SVOC	Bis (2-chloroethoxy) methane	µg/g					
other SVOC	Butyl benzyl phthalate	µg/g					
other SVOC	Chloroethane	µg/g					
other SVOC	Chloromethane	µg/g					
other SVOC	Di-N-Butylphthalate	µg/g					
other SVOC	Di-n-octyl phthalate	µg/g					
other SVOC	Isophorone	µg/g					
other SVOC	Nitrobenzene	µg/g					
other SVOC	N-Nitrosodi-N-propylamine	µg/g					
other SVOC	N-Nitrosodiphenylamine	µg/g					
PAH	1+2-Methylnaphthalenes	µg/g	0.59	0.99	76	**0.062**	0.042 U
PAH	1-Methylnaphthalene	µg/g	0.59	0.99	76	**0.062**	0.03 U
PAH	2-Methylnaphthalene	µg/g	0.59	0.99	76	0.03 U	0.03 U
PAH	Acenaphthene	µg/g	0.072	7.9	560	0.05 U	0.05 U
PAH	Acenaphthylene	µg/g	0.093	0.15	0.15	0.05 U	0.05 U
PAH	Anthracene	µg/g	0.22	0.67	0.67	0.05 U	0.05 U
PAH	Benzo(a)anthracene	µg/g	0.36	0.5	5.1E+11	**0.051**	0.05 U
PAH	Benzo(a)pyrene	µg/g	0.3	0.3	3.8E+13	**0.054**	0.05 U
PAH	Benzo(b&j)fluoranthene	µg/g	0.47	0.78			
PAH	Benzo(b)fluoranthene	µg/g	0.47	0.78	7.7E+13	**0.068**	0.05 U
PAH	Benzo(g,h,i)perylene	µg/g	0.68	6.6	1.2E+13	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/g	0.48	0.78	2.5E+13	0.05 U	0.05 U
PAH	Chrysene	µg/g	2.8	7	3.6E+11	**0.061**	0.05 U
PAH	Dibenzo(a,h)anthracene	µg/g	0.1	0.1	2.4E+13	0.05 U	0.05 U
PAH	Fluoranthene	µg/g	0.69	0.69	40000	**0.089**	0.05 U
PAH	Fluorene	µg/g	0.19	62	62	0.05 U	0.05 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/g	0.23	0.38	8.6E+13	0.05 U	0.05 U
PAH	Naphthalene	µg/g	0.09	0.6	200	0.05 U	0.05 U
PAH	Phenanthrene	µg/g	0.69	6.2	270	**0.059**	0.05 U
PAH	Pyrene	µg/g	1	78	2600	**0.088**	0.05 U
PCB	Aroclor 1016	µg/g					
PCB	Aroclor 1221	µg/g					
PCB	Aroclor 1232	µg/g					
PCB	Aroclor 1242	µg/g					
PCB	Aroclor 1248	µg/g					
PCB	Aroclor 1254	µg/g					
PCB	Aroclor 1260	µg/g					
PCB	Aroclor 1262	µg/g					
PCB	Aroclor 1268	µg/g					
PCB	PCB, Total	µg/g	0.3	0.35			
Perchlorate	Perchlorate	µg/g					
PHC	F1 (C6-C10)	µg/g	25	55	55	35 U	12 U
PHC	F1-BTEX	µg/g	25	55	55		
PHC	F2 (C10-C16)	µg/g	10	98	230	**35**	**12**
PHC	F2-Naphth	µg/g	10	98	230	**35**	**12**
PHC	F3 (C16-C34)	µg/g	240	300		**883**	**134**
PHC	F3-PAH	µg/g	240	300		**883**	**134**
PHC	F4 (C34-C50)	µg/g	120	2800		**252**	50 U
PHC	F4G-SG	µg/g	120	2800			
PHC	**Chrom. to baseline at nC5No**	None				Yes	Yes
PHC	Total Hydrocarbons (C6-C50)	µg/g				**1170**	**146**
SVOC	Hexachlorocyclopentadiene	µg/g					
VOC	1,1,1,2-Tetrachloroethane	µg/g	0.05	0.058	37	0.05 U	0.05 U
VOC	1,1,1-Trichloroethane	µg/g	0.05	0.38	9.8	0.05 U	0.05 U
VOC	1,1,2,2-Tetrachloroethane	µg/g	0.05	0.05	48	0.05 U	0.05 U
VOC	1,1,2-Trichloroethane	µg/g	0.05	0.05	120	0.05 U	0.05 U
VOC	1,1-Dichloroethane	µg/g	0.05	3.5	1600	0.05 U	0.05 U
VOC	1,1-Dichloroethene	µg/g	0.05	0.05	11	0.05 U	0.05 U
VOC	1,2-Dibromoethane	µg/g	0.05	0.05	86	0.05 U	0.05 U
VOC	1,2-Dichlorobenzene	µg/g	0.05	3.4	60	0.05 U	0.05 U
VOC	1,2-Dichloroethane	µg/g	0.05	0.05	180	0.05 U	0.05 U
VOC	1,2-Dichloroethene (Total)	µg/g					

Appendix A1-1. Summary of Soil Analytical Results

Port Lands, Toronto, ON

					Location	TP6	TP6
					Sample ID	S-11102463-121015-KMV-607	S-11102463-121015-KMV-608
					Start Depth	0.91	1.83
					End Depth	0.91	1.83
					Date	10 Dec 2015	10 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards [a.]**	**Table 3 Standards [a.]**	**S-GW3 [b.]**		
VOC	1,2-Dichloropropane	µg/g	0.05	0.05	76	0.05 U	0.05 U
VOC	1,3-Dichlorobenzene	µg/g	0.05	4.8	59	0.05 U	0.05 U
VOC	1,3-Dichloropropene	µg/g	0.05	0.05		0.042 U	0.042 U
VOC	1,4-Dichlorobenzene	µg/g	0.05	0.083	59	0.05 U	0.05 U
VOC	2-Butanone	µg/g	0.5	16	230	0.5 U	0.5 U
VOC	4-Methyl-2-Pentanone	µg/g	0.5	1.7	150	0.5 U	0.5 U
VOC	Acetone	µg/g	0.5	16	16	0.5 U	0.5 U
VOC	Benzene	µg/g	0.02	0.21	14	0.0068 U	0.0068 U
VOC	Bromodichloromethane	µg/g	0.05	13	50	0.05 U	0.05 U
VOC	Bromoform	µg/g	0.05	0.27	21	0.05 U	0.05 U
VOC	Bromomethane	µg/g	0.05	0.05	1.4	0.05 U	0.05 U
VOC	Carbon tetrachloride	µg/g	0.05	0.05	2.3	0.05 U	0.05 U
VOC	Chlorobenzene	µg/g	0.05	2.4	2.4	0.05 U	0.05 U
VOC	Chlorodibromomethane	µg/g	0.05	9.4	48	0.05 U	0.05 U
VOC	Chloroform	µg/g	0.05	0.05	9.5	0.05 U	0.05 U
VOC	cis-1,2-Dichloroethene	µg/g	0.05	3.4	130	0.05 U	0.05 U
VOC	cis-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U
VOC	Dichlorodifluoromethane	µg/g	0.05	16	16	0.05 U	0.05 U
VOC	Dichloromethane	µg/g	0.05	0.1	7.4	0.05 U	0.05 U
VOC	Ethylbenzene	µg/g	0.05	2	17	0.018 U	0.018 U
VOC	Methyl tert-butyl ether (MTBE)	µg/g	0.05	0.75	220	0.05 U	0.05 U
VOC	n-Hexane	µg/g	0.05	2.8	54	0.05 U	0.05 U
VOC	Styrene	µg/g	0.05	0.7	66	0.05 U	0.05 U
VOC	Tetrachloroethene	µg/g	0.05	0.28	18	0.05 U	0.05 U
VOC	Toluene	µg/g	0.2	2.3	68	0.08 U	0.08 U
VOC	trans-1,2-Dichloroethene	µg/g	0.05	0.084	220	0.05 U	0.05 U
VOC	trans-1,3-Dichloropropene	µg/g	0.05	0.05		0.03 U	0.03 U
VOC	Trichloroethylene	µg/g	0.05	0.061	300	**0.034**	0.01 U
VOC	Trichlorofluoromethane	µg/g	0.25	4		0.05 U	0.05 U
VOC	Vinyl Chloride	µg/g	0.02	0.02	270	0.02 U	0.02 U
VOC	Xylene, o	µg/g	0.05	3.1	26	**0.02**	0.02 U
VOC	Xylenes, m & p	µg/g	0.05	3.1	26	0.03 U	0.03 U
VOC	Xylenes, Total	µg/g	0.05	3.1	26	0.05 U	0.05 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

Shading indicates the result exceeded S-GW3 component value.

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

[b.] Rationale for the Development of Soil and Groundwater Standards for the use at Contaminated Sites in Ontaio, Ministry of the Environment, April 15, 2011. S-GW3: Exposure pathway due to movement of a substance from soil to groundwater then to aquatic receptors in a surface water body.

[c.] No MOE Standards are available for this parameter, Ontario Typical Range (OTR) values were used for screening: listed are the OTR98 values for Region 2 from Table 8.2 (Soil - Old Urban Parks) in the "Rationale for the Development of Soil and Ground Water Standards for Use at Contaminated Sites in Ontario", Ministry of the Environment, April 15, 2011, and from the MOE document entitled Ontario Typical Range of Chemical Parameters in Soil, Vegetation, Chemical Parameters in Soil, Vegetation, Moss Bags and Snow (Version 1.0a, 1999).

[d.] MOE pH range standard is 5 to 9 for surface soils (0 to 1.5 metres below ground surface[mbgs]) and 5 to 11 for subsurface soils (greater than 1.5 mbgs).

[e.] No MOE Standard or OTR98 value was available for Zironium an alternate source was used (Shacklette and Boerngen, 1984)

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

µg/g – microgram per gram

ABN - acid/base/neutral compound

CP - chlorophenol

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

OCP - organochlorine pesticide

PAH - polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

PHC - Petroleum Hydrocarbon

SVOC - semi volatile organic compound

U – The analyte was analyzed for, but was not detected bove

VOC - volatile organic compound

Appendix A2
Summary of Groundwater Analytical Results

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	BH14	BH144	MW10A-15	MW10B-15	MW11-15	MW12A-15	MW12A-15	MW12B-15	MW13-15	MW13-15	MW14-15	MW15-15	MW16-15	MW17-15	MW18A-15	MW18A-15	MW18B-15	MW19-15	MW1A-15	MW1B-15
					Sample ID	GW-11102463-112515-KMV-BH14	W.11102463.121415.KMV-BH144	GW-11102463-080615-JC501	GW-11102463-080615-JC502	GW-11102463-111615-TB-MW11-15	GW-11102463-111715-TB-MW12A-15	GW-11102463-112315-TB-12A	GW-11102463-111715-TB-MW12B-15	GW-11102463-111715-BF-MW13-15	GW-11102463-112415-BF-13	GW-11102463-111615-TB-MW14-15	GW-11102463-111615-TB-MW15-15	GW-11102463-111715-BF-MW16-15	GW-11102463-111715-TB-MW17-15	GW-11102463-082515-JC559	GW-11102463-082515-JC560	GW-11102463-082515-JC561	GW-11102463-111715-TB-MW19-15	GW-11102463-081715-JC525	GW-11102463-081715-JC526
					Start Depth (mbgs)			4.27	1.52	3.5	4.26	4.26	1.52	4.26	4.26	4.11	3.96	4.26	4.26	4.42	4.42	1.52	4.41	4.42	1.52
					End Depth (mbgs)			7.32	3.05	6.5	7.31	7.31	3.04	7.31	7.31	7.16	7.01	7.31	7.31	7.47	7.47	3.05	7.46	7.47	3.05
					Date	25 Nov 2015	14 Dec 2015	06 Aug 2015	06 Aug 2015	16 Nov 2015	17 Nov 2015	23 Nov 2015	17 Nov 2015	17 Nov 2015	24 Nov 2015	16 Nov 2015	16 Nov 2015	17 Nov 2015	17 Nov 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	17 Nov 2015	17 Aug 2015	17 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS			**7.2**		**7.49**	**7.57**	**7.33**	**7.38**		**7.53**	**7.62**		**7.29**	**6.9**	**7.39**	**7.55**	**6.99**	**7.07**	**7.2**	**7.62**	**7.9**	**8.01**
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	**0.15**		0.1 U	1 U	0.1 U	0.1 U		**0.17**	0.1 U		0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	**0.11**	0.1 U	0.1 U	**0.17**
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**0.94**		**4.59**	**1.4 D**	0.1 U	**0.66**		**5.32**	**0.22**		**1.56**	**1.32**	1 U	**0.76**	**3.15**	**3.16**	**1.48**	**0.26**	**2**	**0.49**
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**1950 D**		**373**	**273 D**	**30.4**	**86.3**		**194**	**241**		**309**	**371**	**258 D**	**212**	**392**	**392**	**572**	**226**	**156**	**83.6**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	0.1 U		0.1 U	1 U	0.1 U	0.1 U		0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**538**		**91**	**190 D**	**10**	**234**		**281**	**169**		**165**	**161**	**160 D**	**89**	**39**	**38**	**254**	**611**	**78**	**98**
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	0.01 U		0.01 U	0.1 U	0.01 U	0.01 U		0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.03**
INORGANIC	Chloride (Cl)	mg/L	1800	2300	**360 D**				**15.3 D**	**44.7 D**		**44.3 D**	**96 D**		**136 D**	**65.3 D**	**805 D**	**160 D**				**617 D**		
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000			**147000 D**	**1670000 D**											**147000 A**	**153000 A**	**328000 A**		**162000 D**	**62900**
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	**1.67**		0.5 U	5 U	**1.07**	**1.11**		**0.93**	**1.3**		**0.79**	**0.66**	5 U	**0.7**	**0.78**	**0.87**	**0.74**	**0.97**	0.5 U	0.5 U
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	10 U		10 U	10 U	10 U	10 U		10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	**0.68**		**9.65**	**9 D**	0.1 U	**0.15**		**0.15**	**0.22**		**0.78**	**0.42**	1 U	**0.15**	**0.76**	**0.7**	**0.64**	**0.18**	**1.81**	**1.34**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	**0.37**		**0.44**	2 U	**1.27**	0.2 U		0.2 U	**0.33**		0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.85**
INORGANIC	Electrical Conductivity	mS/cm			**2.25**		**1.59**	**6.23**	**0.931**	**0.873**		**1.14**	**1.68**		**1.71**	**1.23**	**3.68**	**1.58**	**2.02**	**2**	**2.08**	**3.11**	**1.53**	**0.87**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	**0.123**		0.05 U	0.5 U	0.05 U	0.05 U		**0.157**	0.05 U		0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29	0.01 U		0.01 U	0.01 U	**0.02**	0.01 U		0.01 U	**0.011**		0.01 U	**0.016**	0.01 U	0.01 U	**0.01**	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**0.095**		**0.76**	**1.08 D**	0.05 U	**0.334**		**1.21**	0.05 U		**2.84**	**0.77**	0.5 U	**0.096**	**3.42**	**3.22**	**0.67**	**0.113**	**0.9**	**1.81**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	0.5 U		**2.05**	**7 D**	0.5 U	0.5 U		**0.54**	0.5 U		0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	**1.43**	0.5 U	**1.75**	**2.27**
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	**0.34**		**0.16**	**3.68 D**	**0.145**	**0.136**		**0.352**	**1.3**		**0.161**	**0.21**	0.5 U	**0.271**	**0.2**	**0.21**	**0.21**	**1.09**	0.05 U	**1.8**
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	0.05 U		0.05 U	0.5 U	0.05 U	0.05 U		0.05 U	0.05 U		0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**168000 D**		**59300**	**440000 D**	**49800**	**25700**		**34700**	**79500**		**176000 D**	**78100**	**590000 D**	**89300**	**94500**	**122000 M**	**260000 M**	**213000 D**	**69800**	**39300**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	0.01 U		0.01 U	0.1 U	0.01 U	0.01 U		0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.02**
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420	0.01 U		**0.81**	**2.94 D**	**0.188**	**0.064**		**0.252**	**0.015**		0.01 U	**0.042**	0.1 U	**0.015**	**2.11**	**1.97**	**0.56**	**0.011**	**0.79**	**0.85**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	0.5 U		0.5 U	5 U	0.5 U	**0.73**		**2.14**	**0.58**		0.5 U	0.5 U	5 U	**0.93**	**0.92**	**0.94**	**0.84**	**2.1**	0.5 U	0.5 U
INORGANIC	WAD Cyanide	µg/L	52	66	2 U		2 U	2 U	20 U	2 U		2 U	20 U		2 U	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	**3.9**		**4.3**	10 U	**26.6**	**1.4**		**1.2**	**3.7**		**2.3**	**1.3**	10 U	**1.3**	**2.5**	**2.2**	**3.8**	**1.8**	**1.3**	**4.6**
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800	**0.566**		**0.09**	**0.06**	**438**	**8.7**		**176**	**1360**		**5.05**	**58500**	**0.162**	**4960**	**1850**	**2610**	**4.83**	0.028 U	**0.11**	**0.42**
PAH	1-Methylnaphthalene	µg/L	1500	1800			**0.06**	**0.06**	**224 D**	**6.9 D**		**85.6 D**	**785 D**		**3.19 D**	**24400 D**	**0.129**	**2330 D**	**745 A**	**1050 A**	**2.29 A**	0.02 U	**0.04**	**0.16**
PAH	2-Methylnaphthalene	µg/L	1500	1800	0.065 UQ		**0.03**	0.02 U	**214 D**	**1.76**		**90.7 D**	**574 D**			**34100 D**	**0.033**	**2630 D**	**1110 A**	**1560 A**	**2.54 A**	0.02 U	**0.06**	**0.25**
PAH	Acenaphthene	µg/L	600	600	**2.83 D**		**0.09**	**2.29**		**29.2 D**		**1.34**	**958 D**			**20900 D**	**0.106**	**2180 D**	**567 A**	**823 A**	**2.9 A**	**0.134**	0.02 U	**0.09**
PAH	Acenaphthylene	µg/L	1.4	1.8	**0.189**		0.02 U	**0.2**	2 U	**0.296**			**70.9**			**1660 D**	0.02 U	**154**	**66.9 A**	**98 A**	**0.23 A**	0.02 U	**0.02**	**0.27**
PAH	Anthracene	µg/L	1	2.4	**0.589**		**0.06**	**0.4**	**15.4 D**	**0.787**		**2.9 D**	**396 D**			**8640 D**	**0.031**	**1020 D**	**208 A**	**377 A**	**1.77 A**	0.02 U	**0.09**	**0.41**
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.218**		**0.04**	**0.33**		**0.193**		**0.08**	**179**			**3550 D**	**0.025**	**550 D**	**86.2 A**	**136 A**	**0.47 A**	0.02 U	**0.04**	**0.87**
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**0.126**		**0.01**	**0.2**		**0.108**		**0.043**	**117**			**2510 D**	**0.014**	**405 D**	**62.4 A**	**96.4 A**	**0.17 A**	0.01 U	**0.05**	**0.85**
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	**0.248**		0.02 U	**0.19**	0.08 U	**0.108**		**0.047**	**92.8**			**1980 D**	0.02 U	**255**	**50.3 A**	**86.8 A**	**0.23 A**	0.02 U	**0.05**	**1.06**
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**0.077**		0.02 U	**0.11**		**0.059**		**0.028**	**43.3**			**854 D**	0.02 U	**129**	**25 A**	**37.3 A**	0.2 U	0.02 U	**0.03**	**0.57**
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**0.08**		0.02 U	**0.07**		**0.033**		0.02 U	**28.7**			**666 D**	0.02 U	**75.2**	**17.4 A**	**23.9 A**	0.2 U	0.02 U	**0.05**	**0.36**
PAH	Chrysene	µg/L	0.7	1	**0.224**		**0.04**	**0.38**		**0.23**		**0.184**	**160**			**3060 D**	**0.025**	**481 D**	**72.2 A**	**103 A**	**0.49 A**	0.02 U	**0.04**	**1.01**
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	0.02 U		0.02 U	**0.02**		0.02 U		0.02 U	**10.4**			**214 D**	0.02 U	**28.8**	**5.6 A**	**8.4 A**	0.2 U	0.02 U	0.02 U	**0.14**
PAH	Fluoranthene	µg/L	73	130	**1.3**		**0.08**	**1**		**0.929**		**0.164**	**416 D**			**7140 D**	**0.04**	**936 D**	**164 A**	**248 A**	**1.55 A**	**0.027**	**0.06**	**1.55**
PAH	Fluorene	µg/L	290	400	**1.79**		**0.08**	**0.58**	**12.1 D**	**4.8 D**		**1.69**	**232**			**7860 D**	0.02 U	**860 D**	**209 A**	**352 A**	**1.46 A**	**0.072**	0.05 U	**0.17**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**0.073**		0.02 U	**0.1**		**0.05**		0.02 U	**39.4**			**811 D**	0.02 U	**116**	**26.6 A**	**42 A**	0.2 U	0.02 U	**0.03**	**0.57**
PAH	Naphthalene	µg/L	1400	1400	1.5 UQ		0.05 U	0.05 U	7 U	**5.7 D**		**176 D**	**816 D**			**53800 D**	0.05 U	**2840 D**	**3280 A**	**4310 A**	**2.85 A**	0.05 U	0.05 U	**0.12**
PAH	Phenanthrene	µg/L	380	580	**0.33**		**0.23**	**0.29**	**15.6 D**	**2.36**		**2.45**	**1030 D**			**27200 D**	**0.082**	**3030 D**	**791 A**	**1140 A**	**5.91 A**	**0.021**	**0.09**	**1.12**
PAH	Pyrene	µg/L	5.7	68	**1.22**		**0.15**	**1.39**		**1.34**		**0.29**	**564 D**			**10700 D**	**0.054**	**1410 D**	**249 A**	**412 A**	**2.38 A**	**0.038**	**0.1**	**1.74**
PHC	F1 (C6-C10)	µg/L	420	750	**103**		25 U	25 U	**1630 D**	**853**		**6450 D**	**678**		**395**	**5420 D**	**28**	**1150**	**2090 A**	**1880 A**	25 U	25 U	25 U	25 U
PHC	F1-BTEX	µg/L	420	750	**102**		25 U	25 U	**910**	**797**		**5730**	**479**		**299**	**2530**	**28**	**921**	310 U	280 U	25 U	25 U	25 U	25 U
PHC	F2 (C10-C16)	ug/g	1000000	1000000																				
PHC	F2 (C10-C16)	µg/L	150	150	**2100**	**200000**	100 U	100 U	**10800**		**1920**	**6400**		**6080**	**3230**	**44900 D**	**2050**	**6140**	**7050**	**11200**	**1660**	**790**	100 U	100 U
PHC	F2-Naphth	µg/L	150	150	**2100**		100 U	100 U	**10800**			**6230**			**3230**	6700 U	**2050**	**3300**	**3800**	**6900**	**1660**	**790**	100 U	100 U
PHC	F3 (C16-C34)	ug/g	1000000	1000000																				
PHC	F3 (C16-C34)	µg/L	500	500	**2210**	**270000**	250 U	**350**	**4050**		**3490**	**3890**		**10800**	**1610**	**32700 D**	**3120**	**8700**	**7910**	**11700**	**1870**	**3170**	250 U	**490**
PHC	F3-PAH	µg/L	500	500	**2210**		250 U	**340**	**4040**			**3890**			**1610**	1300 U	**3120**	**1890**	**6460**	**9540**	**1860**	**3170**	250 U	**480**
PHC	F4 (C34-C50)	µg/g	1000000	1000000																				
PHC	F4 (C34-C50)	µg/L	500	500	**640**	**53000**	250 U	250 U	**320**		**720**	**510**		**2010**	**320**	**3400 D**	250 U	**700**	**1060**	**1370**	**360**	250 U	250 U	**310**
PHC	F4G-SG	µg/L	500	500																	2000 U			
PHC	Chrom. to baseline at nC50	None			No	No	No	No	No		No	No		No	No	No	No	No	No	No	**YES**	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L				**140000**																		
PHC	Total Hydrocarbons (C6-C50)	µg/L			**5060**		370 U	370 U	**16800**			**17300**			**5560**	**86400**	**5200**	**16700**	**18100**	**26200**	**3900**	**3960**	370 U	**790**
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,1-Trichloroethane	µg/L	640	640	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	0.5 U		0.5 U	0.5 U	1 U	0.5 U		2.5 U	3 U		0.5 U	5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethane	µg/L	320	320	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U		1 U	0.8 U		0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloropropane	µg/L	16	16	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.1 U	0.5 U		0.5 U	4.2 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,4-Dichlorobenzene	µg/L	8	8	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U		2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	2-Butanone	µg/L	470000	470000	20 U		20 U	20 U	20 U	20 U		100 U	20 U		20 U	200 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	BH14	BH144	MW10A-15	MW10B-15	MW11-15	MW12A-15	MW12A-15	MW12B-15	MW13-15	MW13-15	MW14-15	MW15-15	MW16-15	MW17-15	MW18A-15	MW18A-15	MW18B-15	MW19-15	MW1A-15	MW1B-15
					Sample ID	GW-11102463-112515-KMV-BH14	W.11102463.121415.KMV-BH144	GW-11102463-080615-JC501	GW-11102463-080615-JC502	GW-11102463-111615-TB-MW11-15	GW-11102463-111715-TB-MW12A-15	GW-11102463-112315-TB-12A	GW-11102463-111715-TB-MW12B-15	GW-11102463-111715-BF-MW13-15	GW-11102463-112415-BF-13	GW-11102463-111615-TB-MW14-15	GW-11102463-111615-TB-MW15-15	GW-11102463-111715-BF-MW16-15	GW-11102463-111715-TB-MW17-15	GW-11102463-082515-JC559	GW-11102463-082515-JC560	GW-11102463-082515-JC561	GW-11102463-111715-TB-MW19-15	GW-11102463-081715-JC525	GW-11102463-081715-JC526
					Start Depth (mbgs)			4.27	1.52	3.5	4.26	4.26	1.52	4.26	4.26	4.11	3.96	4.26	4.26	4.42	4.42	1.52	4.41	4.42	1.52
					End Depth (mbgs)			7.32	3.05	6.5	7.31	7.31	3.04	7.31	7.31	7.16	7.01	7.31	7.31	7.47	7.47	3.05	7.46	7.47	3.05
					Date	25 Nov 2015	14 Dec 2015	06 Aug 2015	06 Aug 2015	16 Nov 2015	17 Nov 2015	23 Nov 2015	17 Nov 2015	17 Nov 2015	24 Nov 2015	16 Nov 2015	16 Nov 2015	17 Nov 2015	17 Nov 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015	17 Nov 2015	17 Aug 2015	17 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	20 U		20 U	20 U	20 U	20 U	20 U		100 U	20 U		20 U	200 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
VOC	Acetone	µg/L	100000	130000	30 U		30 U	30 U	30 U	30 U			150 U	30 U		30 U	300 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
VOC	Benzene	µg/L	44	44	0.5 U		0.5 U	0.5 U	**694 D**	**3.52**			**16.4 D**	**95.9**		**76.6**	**714 D**	0.5 U	**28.4**	**1160 A**	**843 A**	**4.45**	0.5 U	0.5 U	0.5 U
VOC	Bromodichloromethane	µg/L	67000	85000	2 U		2 U	2 U	2 U	2 U			20 U	5 U		2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Bromoform	µg/L	380	380	5 U		5 U	5 U	5 U	5 U			25 U	5 U		5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Bromomethane	µg/L	5.6	5.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Carbon tetrachloride	µg/L	0.79	0.79	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U			1 U	0.2 U		0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/L	500	630	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Chlorodibromomethane	µg/L	65000	82000	2 U		2 U	2 U	2 U	2 U			10 U	2 U		2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Chloroform	µg/L	2.4	2.4	1 U		1 U	1 U	1 U	9 U			40 U	4 U		1 U	10 U	1 U	7.1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	1.5 U			5 U	0.5 U		0.5 U	5 U	0.5 U	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U		0.3 U	0.3 U	0.3 U	0.3 U			1.5 U	0.3 U		0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Dichlorodifluoromethane	µg/L	3500	4400	2 U		2 U	2 U	2 U	2 U			10 U	2 U		2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Dichloromethane	µg/L	610	610	5 U		5 U	5 U	5 U	5 U			25 U	5 U		5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Ethylbenzene	µg/L	1800	2300	0.5 U		0.5 U	0.5 U	**7.09**	**13.6**			**132 D**	**62.5**		**6.78**	**1650 D**	0.5 U	**99.3**	**345**	**350**	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	2 U		2 U	2 U	2 U	2 U			10 U	2 U		2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	n-Hexane	µg/L	51	51	0.5 U		0.5 U	0.5 U	**15.2**	0.5 U			**82 D**	**3.88**		**4.08**	5 U	0.5 U	**1.41**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Styrene	µg/L	1300	1300	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Tetrachloroethene	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Toluene	µg/L	14000	18000	0.5 U		0.5 U	0.5 U	**16**	**7.44**			**9.2 D**	**5.77**		**4.58**	**13.4 D**	0.5 U	**27.2**	**6.9**	**6.8**	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U		0.3 U	0.3 U	0.3 U	0.3 U			1.5 U	0.3 U		0.3 U	3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Trichloroethylene	µg/L	1.6	1.6	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Trichlorofluoromethane	µg/L	2000	2500	5 U		5 U	5 U	5 U	5 U			25 U	5 U		5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Vinyl Chloride	µg/L	0.5	0.5	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U			2.5 U	0.5 U		0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Xylene, o	µg/L	3300	4200	0.3 U		0.3 U	0.3 U	**6.31**	**7.05**			**49 D**	**17.8**		**1**	**245 D**	0.3 U	**38.8**	**158**	**154**	**0.44**	0.3 U	0.3 U	0.3 U
VOC	Xylenes, m & p	µg/L	3300	4200	**0.49**		0.4 U	0.4 U	**2.48**	**23.8**			**515 D**	**17.7**		**6.66**	**259 D**	0.4 U	**36.8**	**303**	**301**	0.4 U	0.4 U	0.4 U	0.4 U
VOC	Xylenes, Total	µg/L	3300	4200	0.5 U		0.5 U	0.5 U	**8.79**	**30.8**			**564**	**35.5**		**7.66**	**505**	0.5 U	**75.6**	**461**	**455**	0.5 U	0.5 U	0.5 U	0.5 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,
Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards
in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW20A-15	MW20B-15	MW21A-15	MW21A-15	MW21B-15	MW22-15	MW23A-15	MW23B-15	MW25A-15	MW25B-15	MW26A-15	MW26B-15	MW26C-15	MW26D-15	MW27A-15	MW27B-15	MW27C-15	MW27D-15	MW28A-15	MW28A-15
						GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-082015-JC	GW-11102463-082015-JC	GW-11102463-082015-JC	GW-11102463-112515-KMV-22	GW-11102463-082415-JC	GW-11102463-082415-JC	GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-081715-JC	GW-11102463-081915-JC	GW-11102463-081915-JC	GW-11102463-081915-JC	GW-11102463-111615-BF-DUP1	GW-11102463-111615-BF-MW28A-15
					Sample ID	575	574	536	537	538		544	545	572	573	506	503	505	504	527	531	532	533		
					Start Depth (mbgs)	3.96	1.52	6.1	6.1	4.57	7.62	6.71	4.57	6.95	1.95	16.77	5.79	3.66	1.52	18.45	7.62	3.05	1.52	29.87	29.87
					End Depth (mbgs)	7.01	3.05	9.15	9.15	6.1	9.14	9.76	6.1	10.06	5.03	19.82	8.84	6.71	3.05	21.49	10.67	6.1	3.05	32.91	32.91
					Date	26 Aug 2015	26 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	25 Nov 2015	24 Aug 2015	24 Aug 2015	26 Aug 2015	26 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015	17 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	16 Nov 2015	16 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS				**7.11**	**7.2**	**7.25**	**7.24**	**7.63**	**7.14**	**7.04**	**7.49**	**7.4**	**7.79**	**7.84**	**7.89**	**7.85**	**7.59**	**7.76**	**7.13**	**7.05**	**7.88**	**7.04**	**6.96**
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000		0.1 U	**0.16**	1 U	1 U	1 U	**0.97**	0.1 U	0.1 U	0.1 U	**0.13**	1 U	0.1 U	1 U	1 U	1 U	0.1 U	0.1 U	**0.3**	1 U	1 U
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900		**1.02**	**2.06**	**1.3 D**	**1.2 D**	1 U	**3.25**	**2.41**	**0.98**	**0.96**	**1.1**	**3.3 D**	**3.17**	1 U	1 U	1 U	**2.07**	**3.67**	**2.46**	1 U	1 U
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000		**891**	**384**	**498 D**	**507 D**	**390 D**	**554**	**567**	**397**	**371**	**171**	**1740 D**	**251**	**254 D**	**243 D**	**1540 D**	**489**	**664**	**284**	**3010 D**	**2970 D**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67		0.1 U	0.1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	1 U	1 U
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000		**15**	**366**	**1370 D**	**1430 D**	**2800 D**	**187**	**35**	**373**	**357**	**494**	**1490 D**	**178**	**210 D**	**210 D**	**2100 D**	**57**	**39**	**281**	100 U	100 U
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7		0.01 U	0.01 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	**0.02**	0.1 U	0.1 U
INORGANIC	Chloride (Cl)	mg/L	1800	2300							**192 D**													**1300 D**	**1340 D**
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000		**97200 M**	**102000 M**	**306000**	**299000**	**308000**		**39500 A**	**228000 A**	**85300 M**	**181000 A**	**310000 D**	**224000 D**	**284000 D**	**380000 D**	**306000 D**	**235000**	**362000**	**141000**		
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810		**0.66**	**1.43**	5 U	5 U	5 U	**0.71**	**0.77**	**0.62**	**0.75**	**0.85**	5 U	0.5 U	5 U	5 U	5 U	**0.75**	**0.75**	**0.89**	5 U	5 U
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66		**3.09**	**2.31**	**9.5 D**	**9.8 D**	**3.6 D**	**2.32**	**5.9**	**6.55**	**1.97**	**0.23**	1 U	**1.81**	1 U	**4.4 D**	1 U	**3.2**	**2.35**	**0.62**	1 U	1 U
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87		0.2 U	0.2 U	2 U	2 U	2 U	**0.2**	0.2 U	0.2 U	**0.51**	0.2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	**3.08**	2 U	2 U
INORGANIC	Electrical Conductivity	mS/cm				**2.33**	**1.92**	**2.53**	**2.52**	**2.79**	**1.78**	**1.54**	**1.93**	**1.66**	**2.29**	**2.1**	**1.91**	**2.23**	**2.75**	**2.54**	**2.28**	**2.91**	**1.74**	**5.01**	**5.01**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25		0.05 U	0.05 U	0.5 U	0.5 U	0.5 U	**0.176**	0.05 U	**0.15**	0.05 U	0.05 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.05 U	0.05 U	**0.05**	0.5 U	0.5 U
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29		0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200		**0.66**	**0.51**	**1.8 D**	**1.99 D**	**1.06 D**	**5.49**	**0.36**	**0.98**	**0.76**	**0.48**	**1.2 D**	**1.75**	0.5 U	**1.57 D**	0.5 U	**0.89**	**0.32**	**4.38**	**2.44 D**	**2.28 D**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490		0.5 U	**1.07**	5 U	5 U	5 U	**2.74**	**1.26**	**1.75**	**0.67**	0.5 U	5 U	**0.84**	5 U	5 U	5 U	0.5 U	0.5 U	**2.02**	5 U	5 U
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63		**0.13**	**1.1**	**0.68 D**	**0.6 D**	**0.51 D**	**0.47**	**0.1**	**0.19**	**0.16**	**4**	0.5 U	**0.58**	0.5 U	0.5 U	0.5 U	**0.22**	**0.29**	**0.36**	0.5 U	0.5 U
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5		0.05 U	0.05 U	0.5 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000		**29900**	**79400**	**189000 D**	**191000 D**	**252000 D**	**103000 D**	**26600**	**148000 M**	**93500**	**225000 M**	**274000 D**	**103000 D**	**130000 D**	**144000 D**	**379000 D**	**24500**	**46900**	**86500**	**524000 D**	**532000 D**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510		0.01 U	0.01 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	**0.04**	0.1 U	0.1 U
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420		**0.11**	**0.28**	**1.53 D**	**1.59 D**	**2.1 D**	**3.46**	**0.29**	**2.07**	**0.17**	**1.05**	0.1 U	**1.19**	0.1 U	**1.28 D**	0.1 U	**0.3**	**0.15**	**2.81**	0.1 U	0.1 U
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250		0.5 U	**0.84**	5 U	5 U	5 U	**1.31**	0.5 U	**0.99**	**1.23**	**1.31**	5 U	0.5 U	5 U	5 U	5 U	**0.67**	**0.7**	**2.32**	5 U	5 U
INORGANIC	WAD Cyanide	µg/L	52	66		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**2.2**	2 U	2 U	2 U	2 U	2 U	**2.8**	2 U	2 U
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100		**3.2**	**3.8**	10 U	10 U	10 U	**4.8**	**3.7**	**2.3**	**5**	1 U	10 U	**2.2**	10 U	10 U	10 U	**5.2**	**1.7**	**7.9**	**12 D**	10 U
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800		0.028 U	**8**	**0.31**	**0.28**	**0.66**	**2.62**	**0.71**	**13.1**	**0.14**	**0.7**	**0.08**	**0.07**	0.028 U	**0.05**	0.028 U	**2.61**	**0.1**	0.028 U	**16.3**	**26**
PAH	1-Methylnaphthalene	µg/L	1500	1800		0.02 U	**3.7 A**	**0.11**	**0.1**	**0.27**	**1.94 D**	**0.55**	**12.4 M**	**0.06**	**0.25**	**0.03**	**0.03**	0.02 U	**0.02**	0.02 U	**2.55**	**0.07**	0.02 U	**10.8 D**	**17.2 D**
PAH	2-Methylnaphthalene	µg/L	1500	1800		0.02 U	**4.3 A**	**0.19**	**0.17**	**0.39**	**0.68 D**	**0.15**	**0.68 M**	**0.07**	**0.45**	**0.05**	**0.04**	0.02 U	**0.02**	0.02 U	**0.06**	**0.03**	0.02 U	**5.47 D**	**8.88 D**
PAH	Acenaphthene	µg/L	600	600		0.02 U	**3.3 A**	0.05 U	0.05 U	**0.08**	**4.33 D**	**0.04**	**3.79 M**	0.02 U	**0.37**	0.02 U	0.02 U	0.02 U	**0.05**	0.02 U	**2.21**	**1.18**	**0.54**	**8.27 D**	**12.1 D**
PAH	Acenaphthylene	µg/L	1.4	1.8		0.02 U	**0.09**	0.02 U	0.02 U	**0.03**	**0.62 D**	0.02 U	**1.17 M**	0.02 U	**0.43**	0.02 U	0.02 U	**0.02**	**0.03**	0.02 U	**0.12**	**0.21**	0.02 U	**0.175**	**0.254**
PAH	Anthracene	µg/L	1	2.4		0.02 U	**1.04**	**0.05**	**0.05**	**0.05**		0.02 U	**1.19 M**	0.02 U	**0.84**	0.02 U	0.02 U	**0.02**	**0.05**	0.02 U	**0.9**	**0.47**	**0.03**	**0.84 D**	**1.42 D**
PAH	Benzo(a)anthracene	µg/L	1.8	4.7		0.02 U	**0.36**	**0.09**	**0.07**	**0.08**	**0.76 D**	0.02 U	**0.39 M**	0.02 U	**1.62**	0.02 U	0.02 U	**0.04**	**0.05**	0.02 U	**0.6**	**0.49**	0.02 U	**0.237**	**0.397**
PAH	Benzo(a)pyrene	µg/L	0.81	0.81		0.01 U	**0.2**	**0.07**	**0.06**	**0.09**	**0.58 D**	0.01 U	**0.3 M**	0.01 U	**1.47**	0.01 U	0.01 U	**0.03**	**0.04**	0.01 U	**0.49**	**0.43**	0.01 U	**0.119**	**0.2**
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75		0.02 U	**0.23**	**0.09**	**0.07**	**0.09**	**0.69 D**	0.02 U	**0.4 M**	0.02 U	**1.54**	0.02 U	0.02 U	**0.02**	**0.03**	0.02 U	**0.55**	**0.42**	0.02 U	**0.104**	**0.177**
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2		0.02 U	**0.1**	**0.04**	**0.03**	**0.09**	**0.38 D**	0.02 U	**0.21 M**	0.02 U	**0.85**	0.02 U	0.02 U	0.02 U	**0.02**	0.02 U	**0.26**	**0.25**	0.02 U	**0.054**	**0.096**
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4		0.02 U	**0.09**	**0.03**	**0.02**	**0.03**	**0.22 D**	0.02 U	0.2 U	0.02 U	**0.48**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.2**	**0.15**	0.02 U	**0.038**	**0.055**
PAH	Chrysene	µg/L	0.7	1		0.02 U	**0.43**	**0.09**	**0.08**	**0.1**	**1.26 D**	0.02 U	**0.58 M**	0.02 U	**1.58**	0.02 U	0.02 U	**0.05**	**0.06**	0.02 U	**0.59**	**0.55**	0.02 U	**0.302**	**0.49**
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.077**	0.02 U	0.2 U	0.02 U	**0.17**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.06**	**0.05**	0.02 U	0.02 U	**0.022**
PAH	Fluoranthene	µg/L	73	130		**0.02**		**0.22**	**0.19**	**0.19**	**4.17 D**	0.02 U	**1.66 M**	0.02 U	**2.77**	0.02 U	0.02 U	**0.04**	**0.14**	0.02 U	**1.65**	**1.09**	**0.03**	**0.73**	**1.06**
PAH	Fluorene	µg/L	290	400		0.02 U	**1.67**	**0.07**	**0.06**	**0.12**	**4.64 D**	**0.07**	**4.29 M**	0.02 U	**0.56**	0.02 U	**0.02**	0.02 U	**0.03**	0.02 U	**1.25**	**0.51**	**0.15**	**2.16**	**3.01 D**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2		0.02 U	**0.09**	**0.04**	**0.03**	**0.06**	**0.34 D**	0.02 U	**0.2 M**	0.02 U	**0.85**	0.02 U	0.02 U	0.02 U	**0.02**	0.02 U	**0.28**	**0.23**	0.02 U	**0.043**	**0.073**
PAH	Naphthalene	µg/L	1400	1400		**0.05**	**93.9 A**	**0.13**	**0.12**	**0.18**	2.5 U	**0.11**	**1.5 M**	**0.1**	**0.64**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.4**	**0.05**	0.05 U	**11.3 D**	**15.2 D**
PAH	Phenanthrene	µg/L	380	580		**0.02**	**4.6 A**	**0.29**	**0.27**	**0.43**	**11.2 D**	**0.14**	**8.45 M**	0.02 U	**2.08**	0.02 U	**0.07**	0.02 U	**0.27**	0.02 U	**3.98 D**	**1.51**	**0.09**	**3.94 D**	**6.28 D**
PAH	Pyrene	µg/L	5.7	68		**0.02**		**0.24**	**0.21**	**0.28**	**4.9 D**	**0.02**	**1.79 M**	0.02 U	**2.97**	0.02 U	**0.03**	**0.12**	**0.25**	0.02 U	**1.53**	**1.33**	**0.03**	**1**	**1.46**
PHC	F1 (C6-C10)	µg/L	420	750		25 U	**11100 A**	25 U	25 U	25 U	25 U	**69**	**46**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F1-BTEX	µg/L	420	750		25 U	1700 U	25 U	25 U	25 U	25 U	**69**	**45**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F2 (C10-C16)	ug/g	1000000	1000000																					
PHC	F2 (C10-C16)	µg/L	150	150		100 U	**1490**	**210**	**270**	**290**	**2980**	**420**	**6590**	**210**	**110**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**1950**	**270**
PHC	F2-Naphth	µg/L	150	150		100 U	**1400**	**210**	**270**	**290**	**2980**	**420**	**6580**	**210**	**110**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**1940**	**260**
PHC	F3 (C16-C34)	ug/g	1000000	1000000																					
PHC	F3 (C16-C34)	µg/L	500	500		250 U	**730**	**480**	**700**	**1300**	**2850**	**630**	**6580**	**470**	**620**	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	**1960**	250 U
PHC	F3-PAH	µg/L	500	500		250 U	**720**	**480**	**700**	**1300**	**2830**	**630**	**6560**	**470**	**600**	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	**1950**	250 U
PHC	F4 (C34-C50)	µg/g	1000000	1000000																					
PHC	F4 (C34-C50)	µg/L	500	500		250 U	250 U	250 U	250 U	250 U	**440**	250 U	**1380**	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
PHC	F4G-SG	µg/L	500	500																					
PHC	Chrom. to baseline at nC50	None				No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L																							
PHC	Total Hydrocarbons (C6-C50)	µg/L				370 U	**13300**	**700**	**960**	**1600**	**6270**	**1110**	**14600**	**680**	**730**	370 U	370 U	370 U	370 U	370 U	370 U	370 U	370 U	**3910**	370 U
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,1-Trichloroethane	µg/L	640	640		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethane	µg/L	320	320		0.5 U	**1.78**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dibromoethane	µg/L	0.25	0.25		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600		0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloropropane	µg/L	16	16		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichlorobenzene	µg/L	7600	9600		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2		0.5 U	0.67 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,4-Dichlorobenzene	µg/L	8	8		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	2-Butanone	µg/L	470000	470000		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW20A-15	MW20B-15	MW21A-15	MW21A-15	MW21B-15	MW22-15	MW23A-15	MW23B-15	MW25A-15	MW25B-15	MW26A-15	MW26B-15	MW26C-15	MW26D-15	MW27A-15	MW27B-15	MW27C-15	MW27D-15	MW28A-15	MW28A-15
						GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-082015-JC	GW-11102463-082015-JC	GW-11102463-082015-JC	GW-11102463-112515-KMV-22	GW-11102463-082415-JC	GW-11102463-082415-JC	GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-080615-JC	GW-11102463-081715-JC	GW-11102463-081915-JC	GW-11102463-081915-JC	GW-11102463-081915-JC	GW-11102463-111615-BF-DUP1	GW-11102463-111615-BF-MW28A-15
					Sample ID	575	574	536	537	538	KMV-22	544	545	572	573	506	503	505	504	527	531	532	533	BF-DUP1	BF-MW28A-15
					Start Depth (mbgs)	3.96	1.52	6.1	6.1	4.57	7.62	6.71	4.57	6.95	1.95	16.77	5.79	3.66	1.52	18.45	7.62	3.05	1.52	29.87	29.87
					End Depth (mbgs)	7.01	3.05	9.15	9.15	6.1	9.14	9.76	6.1	10.06	5.03	19.82	8.84	6.71	3.05	21.49	10.67	6.1	3.05	32.91	32.91
					Date	26 Aug 2015	26 Aug 2015	20 Aug 2015	20 Aug 2015	20 Aug 2015	25 Nov 2015	24 Aug 2015	24 Aug 2015	26 Aug 2015	26 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015	17 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	16 Nov 2015	16 Nov 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
VOC	Acetone	µg/L	100000	130000		30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	**33**	30 U	30 U	30 U
VOC	Benzene	µg/L	44	44		0.5 U	**220**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**14.6**	**15.6**
VOC	Bromodichloromethane	µg/L	67000	85000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Bromoform	µg/L	380	380		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Bromomethane	µg/L	5.6	5.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Carbon tetrachloride	µg/L	0.79	0.79		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/L	500	630		0.5 U	**0.63**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Chlorodibromomethane	µg/L	65000	82000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Chloroform	µg/L	2.4	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	**23.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Dichlorodifluoromethane	µg/L	3500	4400		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Dichloromethane	µg/L	610	610		5 U	5 U	5 U	5 U	5 U	5 U	**5.2**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Ethylbenzene	µg/L	1800	2300		**0.73**	**4740 A**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.78**	**1.59**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	n-Hexane	µg/L	51	51		18 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Styrene	µg/L	1300	1300		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Tetrachloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Toluene	µg/L	14000	18000		**1.08**	**204**	**0.75**	**0.8**	0.5 U	**0.74**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Trichloroethylene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Trichlorofluoromethane	µg/L	2000	2500		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Vinyl Chloride	µg/L	0.5	0.5		**2.05**	**1.42**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Xylene, o	µg/L	3300	4200		**0.51**	**108**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**0.32**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**0.83**	0.3 U	0.3 U	**0.31**	0.3 U
VOC	Xylenes, m & p	µg/L	3300	4200		**1.79**	**6400 A**	**0.62**	**0.49**	0.4 U	0.4 U	0.4 U	**0.54**	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**0.5**	0.4 U	0.4 U	**0.44**	0.4 U
VOC	Xylenes, Total	µg/L	3300	4200		**2.3**	**6510**	**0.62**	0.5 U	0.5 U	0.5 U	0.5 U	**0.86**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.33**	0.5 U	0.5 U	**0.75**	0.5 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,
Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards
in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW28B-15	MW28B-15	MW28C-15	MW28C-15	MW28D-15	MW28D-15	MW29A-15	MW29B-15	MW29C-15	MW29C-15	MW2A-15	MW2B-15	MW30A-15	MW30B-15	MW30C-15	MW30D-15	MW30D-15	MW31A-15	MW31B-15	MW31C-15
					Sample ID	GW-11102463-111615-BF-MW28B-15	W.11102463.121415.KMV-MW28B	GW-11102463-111615-BF-MW28C-15	W.11102463.121415.KMV-MW28C	GW-11102463-111615-BF-MW28D-15	GW-11102463-112315-BF-28D	GW-11102463-111715-BF-MW29A-15	GW-11102463-111715-BF-MW29B-15	GW-11102463-111715-BF-MW29C-15	W.11102463.121415.KMV-MW29C	GW-11102463-081315-JC512	GW-11102463-081315-JC511	GW-11102463-082615-JC570	GW-11102463-082615-JC569	GW-11102463-082615-JC571	GW-11102463-082615-JC567	GW-11102463-082615-JC568	GW-11102463-082515-JC557	GW-11102463-082515-JC554	GW-11102463-082515-JC555
					Start Depth (mbgs)	6.7	6.7	3.65	3.65	1.52	1.52	9.14	5.79	1.52	1.52	4.42	1.52	21.75	7.01	3.05	1.52	1.52	21.12	10.67	7.32
					End Depth (mbgs)	9.75	9.75	6.7	6.7	3.04	3.04	10.66	7.31	3.04	3.04	7.47	3.05	24.8	10.06	6.1	3.05	3.05	24.17	13.72	10.37
					Date	16 Nov 2015	14 Dec 2015	16 Nov 2015	14 Dec 2015	16 Nov 2015	23 Nov 2015	17 Nov 2015	17 Nov 2015	17 Nov 2015	14 Dec 2015	13 Aug 2015	13 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS			**6.81**		**7.44**		**7.19**		**7.39**	**7.21**	**7.51**		**7.77**	**7.53**	**7.43**	**7.15**	**7.27**	**7.45**	**7.46**	**7.51**	**7.03**	**7.4**
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	1 U		**0.1**		1 U		**0.34**	**0.32**	**0.13**		0.1 U	**0.12**	10 U	**0.12**	**0.12**	**0.2**	**0.21**	1 U	0.1 U	0.1 U
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**2.1 D**		**2.49**		**7.8 D**		**2.27**	**2.27**	**2.63**		**3.17**	**0.51**	10 U	**7.85**	**1.19**	**5.35**	**5.84**	1 U	**3.42**	**4.37**
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**1780 D**		**1040 D**		**1670 D**		**265**	**224**	**159**		**206**	**259**	**4980 M**	**436**	**469**	**389**	**404**	**16400 M**	**473**	**426**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	1 U		0.1 U		1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	10 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**150 D**		**145**		**240 D**		**128**	**129**	**61**		**64**	**145**	**1800 M**	**76**	**251**	**474**	**488**	**1930 M**	**182**	**160**
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	0.1 U		0.01 U		0.1 U		**0.093**	0.01 U	0.01 U		0.01 U	**0.05**	1 U	0.01 U	**0.01**	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U
INORGANIC	Chloride (Cl)	mg/L	1800	2300	**85.8 D**		**85.5 D**		**236 D**		**53.7 D**	**35.4 D**	**53.7 D**											
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000											**89900 D**	**433000 D**	**14000000 A**	**62200 M**	**241000 A**	**634000 A**	**683000 A**	**6930000 A**	**98500 M**	**85700 M**
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	5 U		**0.8**		5 U		**0.69**	**1**	**1.16**		0.5 U	**0.53**	50 U	**0.69**	**0.63**	**1.02**	**1.11**	5 U	**0.93**	**0.75**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	10 U		10 U		10 U		10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	1 U		**0.97**		**1 D**		**5.07**	**0.68**	**0.53**		**1.18**	**9.42**	10 U	**1.67**	**1.35**	**0.59**	**0.59**	1 U	**0.89**	**0.77**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	2 U		0.2 U		2 U		0.2 U	0.2 U	0.2 U		0.2 U	**0.97**	20 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U
INORGANIC	Electrical Conductivity	mS/cm			**1.26**		**1.36**		**1.93**		**1.23**	**1.2**	**1.02**		**1.46**	**2.77**	**36**	**1.63**	**2.19**	**3.05**	**3.09**	**18.8**	**1.68**	**1.5**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	0.5 U		0.05 U		0.5 U		**0.074**	0.05 U	**0.096**		0.05 U	**0.07**	5 U	0.05 U	0.05 U	**0.06**	**0.05**	0.5 U	0.05 U	0.05 U
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29	**0.011**		**0.044**		0.01 U		0.01 U	**0.011**	**0.012**		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**6.33 D**		**1.12**		**1.94 D**		**2.8**	**3.41**	**1.36**		**2.07**	**1.04**	5 U	**2.57**	**1.05**	**1.78**	**1.87**	**0.61 M**	**1.08**	**0.83**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	5 U		0.5 U		5 U		**1.8**	**0.57**	**0.52**		**0.76**	**28.8**	50 U	**1.22**	**1.7**	**1.08**	**1.15**	5 U	**0.54**	**1.2**
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	0.5 U		**0.169**		0.5 U		**0.294**	**0.144**	**0.233**		**0.08**	**20.1**	5 U	**0.69**	**0.22**	**0.34**	**0.36**	0.5 U	**0.44**	**0.12**
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	0.5 U		0.05 U		0.5 U		0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**58700 D**		**72400**		**140000 D**		**93500**	**59000**	**33300**		**50300**	**174000 D**	**7330000 M**	**61900**	**130000 M**	**327000 M**	**368000 M**	**2970000 M**	**72200**	**56800**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	0.1 U		0.01 U		0.1 U		**0.079**	0.01 U	0.01 U		0.01 U	**0.02**	1 U	0.01 U	**0.02**	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420	0.1 U		**0.041**		0.1 U		**3.31**	**0.177**	**0.095**		**0.77**	**3.43**	1 U	**1.12**	**1.25**	**0.53**	**0.56**	0.1 U	**0.19**	**0.14**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	5 U		**0.87**		5 U		**0.61**	**0.58**	**1.53**		0.5 U	**1.05**	50 U	**0.7**	**0.5**	**1.25**	**1.33**	5 U	**0.56**	0.5 U
INORGANIC	WAD Cyanide	µg/L	52	66	20 U		20 U		2 U		2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	10 U		**3.9**		10 U		**12.6**	**5.3**	**4.2**		**1.7**	**9.4**	100 U	**8**	**10.5**	**2.7**	**2.7**	10 U	**4.3**	**3.5**
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800	**69100**		**12900**		**767**		**285**	**6430**	**14400**		0.028 U	**0.1**	0.028 U	**0.05**	0.028 U	**0.15**	**0.19**	0.028 U	0.028 U	0.028 U
PAH	1-Methylnaphthalene	µg/L	1500	1800	**28200 D**		**5460 D**		**453 D**		**124 D**	**2610**	**5980 D**		0.02 U	**0.03**	0.02 U	**0.02**	**0.02**	**0.13**	**0.15**	0.02 U	0.02 U	0.02 U
PAH	2-Methylnaphthalene	µg/L	1500	1800	**40900 D**		**7460 D**		**314 D**		**161 D**	**3820 D**	**8430 D**		0.02 U	**0.06**	0.02 U	**0.03**	0.02 U	**0.02**	**0.03**	0.02 U	0.02 U	0.02 U
PAH	Acenaphthene	µg/L	600	600	**21400 D**		**4100 D**		**704 D**		**112 D**	**2280**	**5110 D**		0.02 U	0.02 U	0.02 U	**0.02**	**0.08**	**0.74**	**0.91**	0.02 U	0.02 U	0.02 U
PAH	Acenaphthylene	µg/L	1.4	1.8	**2210 D**		**593 D**		**24.1**		**10.8 D**	**116**	**351 D**		0.02 U	**0.03**	0.02 U	0.02 U	0.02 U	**0.24**	**0.29**	0.02 U	0.02 U	0.02 U
PAH	Anthracene	µg/L	1	2.4	**10400 D**		**1760 D**		**122**		**49.5 D**	**656**	**1920 D**		0.02 U	**0.08**	0.02 U	0.02 U	**0.03**	**0.52**	**0.63**	0.02 U	0.02 U	0.02 U
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**4720 D**		**839 D**		**52.4**		**23.6 D**	**165**	**703 D**		**0.02**	**0.14**	0.02 U	0.02 U	**0.05**	**0.62**	**0.73**	0.02 U	0.02 U	0.02 U
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**3090 D**		**601 D**		**35.2**		**15.7 D**	**106**	**490 D**		**0.02**	**0.13**	0.01 U	**0.01**	**0.07**	**0.76**	**0.8**	0.01 U	0.01 U	0.01 U
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	**2530**		**455 D**		**31.4**		**12.1 D**	**84**	**371 D**		**0.02**	**0.17**	0.02 U	0.02 U	**0.08**	**0.7**	**0.73**	0.02 U	0.02 U	0.02 U
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**1050**		**216 D**		**15.7**		**6.3 D**	**44**	**191**		**0.02**	**0.09**	0.02 U	0.02 U	**0.05**	**0.53**	**0.55**	0.02 U	0.02 U	0.02 U
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**833**		**150 D**		**9.5**		**3.9 D**	**31**	**130 D**		0.02 U	**0.06**	0.02 U	0.02 U	**0.03**	**0.26**	**0.3**	0.02 U	0.02 U	0.02 U
PAH	Chrysene	µg/L	0.7	1	**4270 D**		**767 D**		**50.4**		**20.8 D**	**145**	**612 D**		**0.03**	**0.15**	0.02 U	0.023 U	**0.07**	**0.74**	**0.87**	0.02 U	0.02 U	0.02 U
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	**270**		**55 D**		**3.3**		2 U	20 U	**38.8**		0.02 U	**0.02**	0.02 U	0.02 U	0.02 U	**0.08**	**0.09**	0.02 U	0.02 U	0.02 U
PAH	Fluoranthene	µg/L	73	130	**8900 D**		**1540 D**		**127**		**48.7 D**	**501**	**1590 D**		**0.02**	**0.27**	0.02 U					0.02 U	0.02 U	0.02 U
PAH	Fluorene	µg/L	290	400	**9800 D**		**1810 D**		**180**		**45 D**	**853**	**2140 D**		0.02 U	**0.02**	0.02 U	0.02 U	**0.02**	**0.39**	**0.48**	0.02 U	0.02 U	0.02 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**1010**		**198 D**		**13**		**5.5 D**	**39**	**161**		**0.02**	**0.09**	0.02 U	0.02 U	**0.05**	**0.43**	**0.45**	0.02 U	0.02 U	0.02 U
PAH	Naphthalene	µg/L	1400	1400	**64500 D**		**12400 D**		**510 D**		**579 D**	**8300 D**	**18200 D**		0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
PAH	Phenanthrene	µg/L	380	580	**33800 D**		**5420 D**		**482 D**		**168 D**	**2440**	**6720 D**		0.02 U	**0.17**	**0.02**	**0.05**	**0.07**	**1.07**	**1.29**	0.02 U	**0.02**	0.02 U
PAH	Pyrene	µg/L	5.7	68	**13300 D**		**2290 D**		**191**		**72.7 D**	**733**	**2260 D**		**0.05**	**0.28**	0.02 U					0.02 U	0.02 U	0.02 U
PHC	F1 (C6-C10)	µg/L	420	750	**9170 D**		**7600 D**		**660 D**		**382**	**3030 D**	**13400 D**		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F1-BTEX	µg/L	420	750	**4700**		1100 U		**240**		57 U	**1210**	**7800**		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F2 (C10-C16)	ug/g	1000000	1000000		**350000**																		
PHC	F2 (C10-C16)	µg/L	150	150	**363000 D**	**12000000**	**501000 D**	**210000**		**74700 D**	**4040**	**52000 D**	**118000 D**	**85000**	100 U	100 U	100 U	100 U	**200**	**250**	**250**	100 U	100 U	100 U
PHC	F2-Naphth	µg/L	150	150	**299000**		**488000**				**3460**	**43700**	**99900**		100 U	100 U	100 U	100 U	**200**	**250**	**250**	100 U	100 U	100 U
PHC	F3 (C16-C34)	ug/g	1000000	1000000		**350000**																		
PHC	F3 (C16-C34)	µg/L	500	500	**398000 D**	**13000000**	**539000 D**	**200000**		**125000 D**	**1840**	**23400 D**	**97800 D**	**31000**	250 U	250 U	250 U	250 U	**450**	**640**	**640**	250 U	250 U	250 U
PHC	F3-PAH	µg/L	500	500	**330000**		**527000**				**1490**	**19300**	**85400**		250 U	250 U	250 U	250 U	**450**	**630**	**630**	250 U	250 U	250 U
PHC	F4 (C34-C50)	µg/g	1000000	1000000		**23000**																		
PHC	F4 (C34-C50)	µg/L	500	500	**29100 D**	**1100000**	**38000 D**	**14000**		**26500 D**	250 U	**2300 D**	**9700 D**	**3700**	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
PHC	F4G-SG	µg/L	500	500																				
PHC	Chrom. to baseline at nC50	None			No		No	No		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L				**4000000**		**57000**						**11000**										
PHC	Total Hydrocarbons (C6-C50)	µg/L			**800000**		**1080000**				**6260**	**80700**	**239000**		370 U	370 U	370 U	370 U	**650**	**890**	**890**	370 U	370 U	370 U
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,1-Trichloroethane	µg/L	640	640	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethane	µg/L	320	320	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	4 U		2 U		1 U		0.2 U	2 U	2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloropropane	µg/L	16	16	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	8.5 U		4.2 U		2.1 U		0.5 U	4.2 U	4.2 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,4-Dichlorobenzene	µg/L	8	8	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	2-Butanone	µg/L	470000	470000	400 U		200 U		100 U		20 U	200 U	200 U		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW28B-15	MW28B-15	MW28C-15	MW28C-15	MW28D-15	MW28D-15	MW29A-15	MW29B-15	MW29C-15	MW29C-15	MW2A-15	MW2B-15	MW30A-15	MW30B-15	MW30C-15	MW30D-15	MW30D-15	MW31A-15	MW31B-15	MW31C-15
					Sample ID	GW-11102463-111615-BF-MW28B-15	W.11102463.121415.KMV-MW28B	GW-11102463-111615-BF-MW28C-15	W.11102463.121415.KMV-MW28C	GW-11102463-111615-BF-MW28D-15	GW-11102463-112315-BF-28D	GW-11102463-111715-BF-MW29A-15	GW-11102463-111715-BF-MW29B-15	GW-11102463-111715-BF-MW29C-15	W.11102463.121415.KMV-MW29C	GW-11102463-081315-JC512	GW-11102463-081315-JC511	GW-11102463-082615-JC570	GW-11102463-082615-JC569	GW-11102463-082615-JC571	GW-11102463-082615-JC567	GW-11102463-082615-JC568	GW-11102463-082515-JC557	GW-11102463-082515-JC554	GW-11102463-082515-JC555
					Start Depth (mbgs)	6.7	6.7	3.65	3.65	1.52	1.52	9.14	5.79	1.52	1.52	4.42	1.52	21.75	7.01	3.05	1.52	1.52	21.12	10.67	7.32
					End Depth (mbgs)	9.75	9.75	6.7	6.7	3.04	3.04	10.66	7.31	3.04	3.04	7.47	3.05	24.8	10.06	6.1	3.05	3.05	24.17	13.72	10.37
					Date	16 Nov 2015	14 Dec 2015	16 Nov 2015	14 Dec 2015	16 Nov 2015	23 Nov 2015	17 Nov 2015	17 Nov 2015	17 Nov 2015	14 Dec 2015	13 Aug 2015	13 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	25 Aug 2015	25 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	400 U		200 U		100 U		20 U	200 U	200 U		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
VOC	Acetone	µg/L	100000	130000	600 U		300 U		150 U		30 U	300 U	300 U		30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
VOC	Benzene	µg/L	44	44	**198 D**		**1880 D**		**374 D**		**141**	**463 D**	**222 D**		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Bromodichloromethane	µg/L	67000	85000	40 U		20 U		10 U		2 U	20 U	20 U		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Bromoform	µg/L	380	380	100 U		50 U		25 U		5 U	50 U	50 U		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Bromomethane	µg/L	5.6	5.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Carbon tetrachloride	µg/L	0.79	0.79	4 U		2 U		1 U		0.2 U	2 U	2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/L	500	630	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.68**	**0.71**	0.5 U	0.5 U	0.5 U
VOC	Chlorodibromomethane	µg/L	65000	82000	40 U		20 U		10 U		2 U	20 U	20 U		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Chloroform	µg/L	2.4	2.4	20 U		10 U		5 U		1 U	10 U	38 U		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	6 U		3 U		1.5 U		0.3 U	3 U	3 U		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Dichlorodifluoromethane	µg/L	3500	4400	40 U		20 U		10 U		2 U	20 U	20 U		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Dichloromethane	µg/L	610	610	100 U		50 U		25 U		5 U	50 U	50 U		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Ethylbenzene	µg/L	1800	2300	**3250 D**		**1840 D**		**29 D**		**124**	**803 D**	**3000 D**		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	40 U		20 U		10 U		2 U	20 U	20 U		2 U	2 U	2 U	2 U	**27.2**	**2.7**	**2.8**	2 U	2 U	2 U
VOC	n-Hexane	µg/L	51	51	10 U		5 U		2.5 U		0.5 U	10 U	**85.9 D**		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Styrene	µg/L	1300	1300	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Tetrachloroethene	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Toluene	µg/L	14000	18000	**19 D**		**1040 D**		**4.3 D**		**2.54**	**10.7 D**	**88 D**		0.5 U	**0.63**	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	6 U		3 U		1.5 U		0.3 U	3 U	3 U		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Trichloroethylene	µg/L	1.6	1.6	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Trichlorofluoromethane	µg/L	2000	2500	100 U		50 U		25 U		5 U	50 U	50 U		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Vinyl Chloride	µg/L	0.5	0.5	10 U		5 U		2.5 U		0.5 U	5 U	5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Xylene, o	µg/L	3300	4200	**695 D**		**585 D**		**7.3 D**		**34.4**	**210 D**	**815 D**		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Xylenes, m & p	µg/L	3300	4200	**344 D**		**1200 D**		**8.7 D**		**46.6**	**328 D**	**1460 D**		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
VOC	Xylenes, Total	µg/L	3300	4200	**1040**		**1780**		**16**		**81**	**538**	**2270**		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW31D-15	MW32A-15	MW32A-15	MW32B-15	MW32C-15	MW32D-15	MW33A-15	MW33A-15	MW33B-15	MW33C-15	MW33D-15	MW34A-15	MW34A-15	MW34B-15	MW34C-15	MW34D-15	MW35A-15	MW35B-15	MW35C-15	MW35D-15
					Sample ID	GW-11102463-082515-JC 556	GW-11102463-082615-JC 565	GW-11102463-082615-JC 566	GW-11102463-082615-JC 564	GW-11102463-082615-JC 563	GW-11102463-082715-JC 562	GW-11102463-112515-KMV-33A	GW-11102463-112515-KMV-DUP3	GW-11102463-112515-KMV-33B	GW-11102463-112515-KMV-33C	GW-11102463-112515-KMV-33D	GW-11102463-082415-JC 546	GW-11102463-082415-JC 547	GW-11102463-082115-JC 543	GW-11102463-082115-JC 542	GW-11102463-082115-JC 541	GW-11102463-081715-JC 521	GW-11102463-082015-JC 540	GW-11102463-082015-JC 539	GW-11102463-082515-JC 558
					Start Depth (mbgs)	4.57	17.07	17.07	7.62	3.96	1.52	17.06	17.06	8.53	5.33	1.52	18.14	18.14	10.67	7.62	4.57	19.97	6.71	4.57	9.76
					End Depth (mbgs)	6.1	20.12	20.12	10.67	7.01	3.05	20.11	20.11	10.05	6.85	3.04	21.2	21.2	13.72	10.67	6.1	23.02	9.76	6.1	12.8
					Date	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	27 Aug 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	24 Aug 2015	24 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	17 Aug 2015	20 Aug 2015	20 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS			**7.08**	**7.55**	**7.7**	**7.11**	**7**	**7.15**	**7.69**	**7.52**	**6.81**	**6.97**	**7.31**	**7.37**	**7.39**	**6.98**	**6.88**	**7.35**	**7.63**	**7.09**	**7.76**	**7.15**
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	**0.29**	1 U	1 U	0.1 U	0.1 U	**0.14**	1 U	1 U	0.1 U	0.1 U	**0.23**	10 U	10 U	**0.15**	0.1 U	0.1 U	1 U	0.1 U	1 U	0.1 U
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**3.51**	1 U	1 U	**4.57**	**1.48**	**2.91**	1 U	1 U	**0.87**	**0.27**	**1.34**	10 U	10 U	**12**	**1.32**	**1.08**	**2.8 D**	**0.94**	**1.5 D**	**2.49**
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**325**	**3060 M**	**3070 M**	**543**	**525**	**426**	**7920 D**	**14300 D**	**380**	**685**	**465**	**42300 M**	**41400 M**	**553**	**660**	**287**	**2690 D**	**879**	**150 D**	**729**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	10 U	10 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	1 U	0.1 U
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**849**	**1540 M**	**1530 M**	**444**	**150**	**92**	**2520 D**	**2340 D**	**25**	**29**	**250**	**1700 M**	**1800 M**	**37**	**24**	**367**	**1340 D**	**45**	**870 D**	**110**
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	0.01 U	0.1 U	0.1 U	0.01 U	0.01 U	**0.08**	0.1 U	0.1 U	0.01 U	0.01 U	**0.102**	1 U	1 U	**0.04**	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U
INORGANIC	Chloride (Cl)	mg/L	1800	2300							**3370 D**	**5000 D**	**79.9 D**	**394 D**	**411 D**									
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000	**154000 M**	**875000 A**	**850000 A**	**89100 M**	**44000 A**	**91100 M**						**10900000 A**	**10900000 A**	**34400 A**	**25200 A**	**145000 A**	**380000 D**	**327000**	**76600**	**233000 A**
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	**0.65**	5 U	5 U	**0.75**	**0.72**	**0.78**	5 U	5 U	**0.82**	**0.63**	**0.77**	50 U	50 U	**0.8**	**0.54**	**0.75**	5 U	**0.69**	5 U	**0.79**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	**1.09**	**1.1 M**	**1.1 M**	**3.76**	**10.7**	**14.4**	1 U	1 U	**0.87**	**0.95**	**4.63**	10 U	10 U	**1.05**	**0.65**	**0.39**	**1.3 D**	**6.45**	**11.2 D**	**1.03**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	0.2 U	2 U	2 U	0.2 U	0.2 U	**5.89**	**2.7 D**	2 U	0.2 U	0.2 U	**3.68**	20 U	20 U	0.2 U	0.2 U	**0.51**	2 U	**0.2**	2 U	0.2 U
INORGANIC	Electrical Conductivity	mS/cm			**2.12**	**3.55**	**3.54**	**1.45**	**1.71**	**1.76**	**8.42**	**12.3**	**1.57**	**2.54**	**2.75**	**28.4**	**28.3**	**1.45**	**1.55**	**1.67**	**2.15**	**2.6**	**3.26**	**2.17**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	**0.07**	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	**0.54 D**	0.5 U	0.05 U	0.05 U	0.05 U	**0.152**	5 U	5 U	0.05 U	0.05 U	0.05 U	0.5 U	**0.08**	0.5 U	**0.05**
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**11.6**	0.5 U	0.5 U	**1.43**	**0.32**	**2.52**	**0.75 D**	**0.59 D**	**1.41**	**0.165**	**2.12**	5 U	5 U	**2.37**	**0.53**	**0.45**	0.5 U	**0.63**	**1.62 D**	**1.25**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	**1.33**	5 U	5 U	**1.02**	**1.07**	**6.03**	5 U	5 U	0.5 U	**2.34**	**12.7**	50 U	50 U	**0.72**	0.5 U	0.5 U	5 U	**0.98**	**6.1 D**	0.5 U
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	**0.37**	0.5 U	0.5 U	**0.22**	**0.19**	**0.45**	0.5 U	0.5 U	**0.311**	**0.148**	**0.414**	5 U	5 U	**0.37**	**0.15**	**0.1**	0.5 U	**0.14**	0.5 U	**0.16**
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	0.05 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	5 U	5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.5 U	0.05 U
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**209000 M**	**422000 M**	**415000 M**	**69000**	**34000**	**61900**	**1430000 D**	**2150000 D**	**33900**	**188000 D**	**207000 D**	**4670000 M**	**4630000 M**	**42600**	**14500**	**104000 M**	**199000 D**	**124000 D**	**127000 D**	**105000 M**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	0.01 U	0.1 U	0.1 U	0.01 U	0.01 U	**0.04**	0.1 U	0.1 U	0.01 U	0.01 U	**0.105**	1 U	1 U	**0.02**	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420	**6.35**	**0.17 M**	**0.18 M**	**0.17**	**0.54**	**5.7**	**0.3 D**	**0.22 D**	0.01 U	**0.036**	**5.39**	1 U	1 U	**0.94**	**0.37**	**0.18**	**0.13 D**	**0.62**	**7.33 D**	**0.03**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	**1.61**	5 U	5 U	**0.75**	0.5 U	**0.58**	5 U	5 U	0.5 U	0.5 U	**1.6**	50 U	50 U	0.5 U	0.5 U	**0.64**	5 U	0.5 U	5 U	**1.13**
INORGANIC	WAD Cyanide	µg/L	52	66	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	**3.3**	10 U	10 U	**2.9**	**2.5**	**5.4**	**22 D**	10 U	**3.3**	**1.7**	**10.2**	100 U	100 U	**13**	**3.3**	**5.7**	10 U	**99.9**	10 U	**3.4**
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800	0.028 U	0.028 U	0.028 U	0.028 U	**0.09**	0.028 U	0.028 U	0.028 U	0.028 U	0.028 U	0.028 U	**0.07**	**0.07**	0.028 U	0.028 U	**0.2**	0.028 U	**0.1**	**1.17**	0.028 U
PAH	1-Methylnaphthalene	µg/L	1500	1800	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.03**	0.02 U	0.02 U	**0.08**	0.02 U	**0.03**	**0.38**	0.02 U
PAH	2-Methylnaphthalene	µg/L	1500	1800	0.02 U	0.02 U	0.02 U	0.02 U	**0.06**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	**0.04**	0.02 U	0.02 U	**0.11**	0.02 U	**0.07**	**0.77**	0.02 U
PAH	Acenaphthene	µg/L	600	600	**0.14**	0.02 U	0.02 U	0.02 U	0.02 U	**0.18**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.5**	0.02 U	0.02 U	**0.27**	0.02 U
PAH	Acenaphthylene	µg/L	1.4	1.8	**0.06**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.08**	0.02 U	0.02 U	**0.12**	0.02 U
PAH	Anthracene	µg/L	1	2.4	**0.12**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.34**	0.02 U	0.02 U	**0.13**	0.02 U
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.17**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.034**	0.02 U	0.02 U	0.02 U	0.02 U	**0.25**	0.02 U	0.02 U	**0.24**	0.02 U
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**0.24**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.014**	0.01 U	0.01 U	**0.055**	0.01 U	0.01 U	0.01 U	0.01 U	**0.34**	0.01 U	0.01 U	**0.19**	**0.01**
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	**0.29**	0.02 U	0.02 U	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.02 U	**0.067**	0.02 U	0.02 U	0.02 U	0.02 U	**0.36**	0.02 U	0.02 U	**0.19**	0.02 U
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**0.19**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	**0.28**	0.02 U	0.02 U	**0.12**	0.02 U
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**0.12**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.024**	0.02 U	0.02 U	0.02 U	0.02 U	**0.13**	0.02 U	0.02 U	**0.06**	0.02 U
PAH	Chrysene	µg/L	0.7	1	**0.24**	0.02 U	0.02 U	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.036**	0.02 U	0.02 U	0.02 U	0.02 U	**0.33**	0.02 U	0.02 U	**0.27**	**0.02**
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.04**	0.02 U	0.02 U	**0.03**	0.02 U
PAH	Fluoranthene	µg/L	73	130		0.02 U	0.02 U	**0.03**	0.02 U	**0.05**	0.02 U	0.02 U	0.02 U	0.02 U	**0.051**	0.02 U	0.02 U	0.02 U	0.02 U	**0.9**	0.02 U	0.02 U	**0.88**	
PAH	Fluorene	µg/L	290	400	**0.08**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.24**	0.02 U	0.02 U	**0.36**	0.02 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**0.16**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	**0.22**	0.02 U	0.02 U	**0.11**	0.02 U
PAH	Naphthalene	µg/L	1400	1400	0.05 U	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.23**	0.05 U	**0.05**	**0.42**	0.05 U
PAH	Phenanthrene	µg/L	380	580	**0.35**	0.02 U	**0.02**	**0.03**	**0.09**	0.02 U	**0.02**	**0.023**	0.02 U	0.02 U	**0.041**	**0.03**	**0.03**	0.02 U	**0.02**	**1.33**	0.02 U	**0.04**	**0.85**	**0.02**
PAH	Pyrene	µg/L	5.7	68		0.02 U	0.02 U	**0.03**	0.02 U	**0.07**	0.02 U	0.02 U	0.02 U	0.02 U	**0.158**	0.02 U	0.02 U	0.02 U	**0.02**	**1.1**	0.02 U	**0.02**	**1.26**	**0.03**
PHC	F1 (C6-C10)	µg/L	420	750	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F1-BTEX	µg/L	420	750	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
PHC	F2 (C10-C16)	ug/g	1000000	1000000																				
PHC	F2 (C10-C16)	µg/L	150	150	100 U	100 U	100 U	**480**	**130**	**980**	100 U	100 U	100 U	**120**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**190**	100 U
PHC	F2-Naphth	µg/L	150	150	100 U	100 U	100 U	**480**	**130**	**980**	100 U	100 U	100 U	**120**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**190**	100 U
PHC	F3 (C16-C34)	ug/g	1000000	1000000																				
PHC	F3 (C16-C34)	µg/L	500	500	**310**	250 U	250 U	**720**	250 U	**1450**	250 U	250 U	250 U	250 U	**460**	250 U	250 U	250 U	250 U	**630**	250 U	250 U	**680**	250 U
PHC	F3-PAH	µg/L	500	500	**310**	250 U	250 U	**720**	250 U	**1450**	250 U	250 U	250 U	250 U	**460**	250 U	250 U	250 U	250 U	**620**	250 U	250 U	**670**	250 U
PHC	F4 (C34-C50)	µg/g	1000000	1000000																				
PHC	F4 (C34-C50)	µg/L	500	500	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	**1270**	250 U	250 U	250 U	250 U
PHC	F4G-SG	µg/L	500	500																				
PHC	Chrom. to baseline at nC50	None			No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L																						
PHC	Total Hydrocarbons (C6-C50)	µg/L			370 U	370 U	370 U	**1200**	370 U	**2430**	370 U	370 U	370 U	370 U	**460**	370 U	370 U	370 U	370 U	**1900**	370 U	370 U	**870**	370 U
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,1-Trichloroethane	µg/L	640	640	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethane	µg/L	320	320	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,2-Dichloropropane	µg/L	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	1,4-Dichlorobenzene	µg/L	8	8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	2-Butanone	µg/L	470000	470000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW31D-15	MW32A-15	MW32A-15	MW32B-15	MW32C-15	MW32D-15	MW33A-15	MW33A-15	MW33B-15	MW33C-15	MW33D-15	MW34A-15	MW34A-15	MW34B-15	MW34C-15	MW34D-15	MW35A-15	MW35B-15	MW35C-15	MW35D-15
						GW-11102463-082515-JC	GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-082615-JC	GW-11102463-082715-JC	GW-11102463-112515-	GW-11102463-112515-	GW-11102463-112515-	GW-11102463-112515-	GW-11102463-112515-	GW-11102463-082415-JC	GW-11102463-082415-JC	GW-11102463-082115-JC	GW-11102463-082115-JC	GW-11102463-082115-JC	GW-11102463-081715-JC	GW-11102463-082015-JC	GW-11102463-082015-JC	GW-11102463-082515-JC
					Sample ID	556	565	566	564	563	562	KMV-33A	KMV-DUP3	KMV-33B	KMV-33C	KMV-33D	546	547	543	542	541	521	540	539	558
					Start Depth (mbgs)	4.57	17.07	17.07	7.62	3.96	1.52	17.06	17.06	8.53	5.33	1.52	18.14	18.14	10.67	7.62	4.57	19.97	6.71	4.57	9.76
					End Depth (mbgs)	6.1	20.12	20.12	10.67	7.01	3.05	20.11	20.11	10.05	6.85	3.04	21.2	21.2	13.72	10.67	6.1	23.02	9.76	6.1	12.8
					Date	25 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	26 Aug 2015	27 Aug 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	25 Nov 2015	24 Aug 2015	24 Aug 2015	21 Aug 2015	21 Aug 2015	21 Aug 2015	17 Aug 2015	20 Aug 2015	20 Aug 2015	25 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
VOC	Acetone	µg/L	100000	130000		30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
VOC	Benzene	µg/L	44	44		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Bromodichloromethane	µg/L	67000	85000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Bromoform	µg/L	380	380		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Bromomethane	µg/L	5.6	5.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Carbon tetrachloride	µg/L	0.79	0.79		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOC	Chlorobenzene	µg/L	500	630		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Chlorodibromomethane	µg/L	65000	82000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Chloroform	µg/L	2.4	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Dichlorodifluoromethane	µg/L	3500	4400		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	Dichloromethane	µg/L	610	610		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**7.5**	5 U	**19.8**	5 U	5 U	5 U	5 U
VOC	Ethylbenzene	µg/L	1800	2300		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	n-Hexane	µg/L	51	51		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Styrene	µg/L	1300	1300		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Tetrachloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Toluene	µg/L	14000	18000		**0.56**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.68**	0.5 U	**0.5**	0.5 U	0.5 U	**1.34**	0.5 U
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Trichloroethylene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Trichlorofluoromethane	µg/L	2000	2500		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VOC	Vinyl Chloride	µg/L	0.5	0.5		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	Xylene, o	µg/L	3300	4200		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VOC	Xylenes, m & p	µg/L	3300	4200		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**0.78**	0.4 U
VOC	Xylenes, Total	µg/L	3300	4200		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.78**	0.5 U

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,
Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards
in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW36A-15	MW36B-15	MW36C-15	MW36D-15	MW37B-15	MW37C-15	MW37D-15	MW38A-15	MW38B-15	MW38C-15	MW39A-15	MW39B-15	MW39C-15	MW39D-15	MW3A-15	MW3B-15	MW3B-15	MW40A-15	MW40B-15	MW40C-15
					Sample ID	GW-11102463-081415-JC-520	GW-11102463-081315-JC-517	GW-11102463-081315-JC-516	GW-11102463-081315-JC-515	GW-11102463-082415-JC-551	GW-11102463-082415-JC-552	GW-11102463-082415-JC-553	GW-11102463-111615-TB-MW38A-15	GW-11102463-111615-TB-MW38B-15	GW-11102463-111615-TB-MW38C-15	GW-11102463-082715-JC-576	GW-11102463-082715-JC-577	GW-11102463-082715-JC-579	GW-11102463-082715-JC-578	GW-11102463-081715-JC-524	GW-11102463-081715-JC-522	GW-11102463-081715-JC-523	GW-11102463-080615-JC-510	GW-11102463-080615-JC-507	GW-11102463-080615-JC-509
					Start Depth (mbgs)	18.49	7.62	3.05	1.52	7.62	4.57	1.52	7.92	4.87	1.52	12.8	7.62	4.57	1.52	4.57	1.52	1.52	13.2	7.67	3.05
					End Depth (mbgs)	21.54	10.67	6.1	3.05	10.67	7.62	3.05	9.14	6.4	3.04	15.85	10.67	7.62	3.05	7.62	3.05	3.05	16.24	10.67	6.1
					Date	14 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	16 Nov 2015	16 Nov 2015	16 Nov 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS				**7.89**	**7.56**	**7.57**	**7.56**	**7.38**	**7.85**	**7.67**	**7.45**	**7.51**	**7.53**	**8**	**7.26**	**6.97**	**7.33**	**7.53**	**7.67**	**7.63**	**7.98**	**7.26**	**7.12**
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000		1 U	1 U	0.1 U	**0.17**	1 U	0.1 U	0.1 U	**0.15**	**0.12**	**0.35**	1 U	0.1 U	0.1 U	**0.28**	0.1 U	**0.17**	**0.17**	1 U	0.1 U	1 U
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900		1 U	**6 D**	**3.77**	**5.7**	**1.3 M**	**0.99**	**4.12**	**3.44**	**1.57**	**9.87**	1 U	**0.9**	**0.36**	**3.57**	**0.94**	**1.08**	**1.09**	1 U	**2.08**	**2 D**
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000		**628 D**	**53.3 D**	**108**	**147**	**423 M**	**309**	**150**	**222**	**182**	**367**	**1550 M**	**665**	**574**	**273**	**390**	**201**	**202**	**1360 D**	**355**	**629 D**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67		1 U	1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	1 U
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000		**2560 D**	**180 D**	**119**	**137**	100 U	**94**	**60**	**100**	**86**	**563**	**2440 M**	**40**	**25**	**190**	**73**	**230**	**219**	**3100 D**	**26**	100 U
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7		0.1 U	0.1 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U
INORGANIC	Chloride (Cl)	mg/L	1800	2300									**47.4 D**	**34 D**	**19.1 D**										
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000		**121000 D**	**94400 D**	**192000 D**	**354000 D**	**841000 A**	**495000 A**	**59800 A**				**762000 A**	**19200 M**	**14400 M**	**68400 M**	**657000 D**	**151000 D**	**171000 D**	**591000 D**	**39200 D**	**79000 D**
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810		5 U	5 U	0.5 U	**0.6**	5 U	0.5 U	**0.59**	**0.8**	**0.74**	**1.03**	5 U	**0.86**	**0.63**	**0.9**	**0.67**	0.5 U	**0.55**	5 U	0.5 U	5 U
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66		1 U	1 U	**3.19**	**5.99**	**4.3 M**	**1.88**	**2.49**	**0.42**	**0.39**	**0.27**	1 U	**1.03**	**0.98**	**0.72**	**2.64**	**3.33**	**3.3**	1 U	**2.22**	**13.5 D**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87		2 U	2 U	**0.22**	**0.23**	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	**0.66**	0.2 U	0.2 U	**0.22**	**1.16**	**1.16**	2 U	0.2 U	2 U
INORGANIC	Electrical Conductivity	mS/cm				**1.45**	**2.17**	**2.04**	**2.32**	**3.62**	**2.74**	**1**	**1.13**	**1.06**	**1.28**	**2.94**	**1.42**	**1.46**	**1.37**	**3.13**	**1.86**	**1.9**	**2.51**	**1.45**	**1.98**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25		0.5 U	0.5 U	0.05 U	**0.08**	0.5 U	0.05 U	**0.06**	0.05 U	0.05 U	**0.07**	0.5 U	0.05 U	**0.05**	**0.31**	**0.1**	**0.09**	**0.09**	0.5 U	0.05 U	0.5 U
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200		0.5 U	**1.02 D**	**2.55**	**0.75**	**3.02 M**	**1.07**	**0.92**	**2.08**	**1.25**	**1.21**	0.5 U	**0.4**	**0.15**	**3.14**	**0.41**	**3.17**	**3.15**	**2.92 D**	**0.43**	0.5 U
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490		5 U	5 U	**1.76**	**4.68**	5 U	**2.17**	**5.41**	**0.52**	0.5 U	**0.74**	5 U	**0.61**	0.5 U	**0.51**	0.5 U	**4**	**3.92**	5 U	0.5 U	5 U
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63		0.5 U	0.5 U	**0.06**	**0.38**	0.5 U	**0.07**	**0.05**	**0.223**	**0.158**	**0.108**	0.5 U	**0.08**	**0.17**	**0.23**	**0.15**	**1.01**	**1.12**	0.5 U	**0.29**	0.5 U
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5		0.5 U	0.5 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.05 U	0.5 U
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000		**285000 D**	**87800 D**	**96100**	**124000 D**	**454000 M**	**320000 M**	**44200**	**35200**	**34000**	**36000**	**498000 M**	**13500**	**7440**	**87600**	**223000 D**	**119000 D**	**119000 D**	**363000 D**	**28100**	**46200 D**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510		0.1 U	0.1 U	0.01 U	**0.01**	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420		**0.16 D**	**0.15 D**	**0.93**	**2.41**	**0.79 M**	**0.61**	**1.08**	**0.016**	**0.032**	**0.227**	0.1 U	**0.02**	**0.08**	**0.94**	**0.35**	**3.74**	**3.75**	**0.42 D**	**0.11**	**0.74 D**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250		5 U	5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	**1.09**	**1.02**	**0.86**	5 U	0.5 U	0.5 U	**0.52**	**0.53**	**0.97**	**0.87**	5 U	**0.78**	5 U
INORGANIC	WAD Cyanide	µg/L	52	66		2 U	2 U	2 U	**3.7**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100		10 U	10 U	**4.6**	**7.3**	10 U	**1.7**	**2.5**	**3.7**	**1.6**	**2.7**	10 U	**6.2**	**2.7**	**3.1**	**2.3**	**1.7**	**1.9**	10 U	**1.7**	10 U
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800		**0.06**	0.028 U	**0.1**	**0.07**	**8.52**	**0.05**	0.028 U	**1.67**	**11.3**	0.57 U	0.028 U	0.028 U	0.028 U	**0.84**	**0.05**	**0.07**	**0.08**	**0.03**	0.028 U	**0.47**
PAH	1-Methylnaphthalene	µg/L	1500	1800		**0.02**	0.02 U	**0.04**	**0.03**	**8.43 A**	**0.02**	0.02 U		**11.3 D**	0.4 U	0.02 U	0.02 U	**0.02**	**0.82**	**0.02**	**0.03**	**0.03**	**0.03**	0.02 U	**0.28**
PAH	2-Methylnaphthalene	µg/L	1500	1800		**0.03**	**0.02**	**0.05**	**0.04**	**0.08**	**0.03**	0.02 U		0.2 U	0.4 U	0.02 U	0.02 U	0.02 U	**0.02**	**0.02**	**0.04**	**0.04**	0.02 U	0.02 U	**0.19**
PAH	Acenaphthene	µg/L	600	600		0.02 U	0.02 U	0.02 U	**0.02**	**5.16 A**	0.02 U	0.02 U	**10.3 D**	**15.7 D**	**0.73 D**	0.02 U	0.02 U	**0.16**	**2.51**	**0.14**	0.03 U	0.03 U	**0.03**	**0.03**	**0.2**
PAH	Acenaphthylene	µg/L	1.4	1.8		0.02 U	0.02 U	0.02 U	**0.04**	**1.07**	0.02 U	0.02 U			**1.59 D**	0.02 U	0.02 U	**0.02**	**0.49**	**0.21**	**0.15**	**0.17**	0.02 U	**0.05**	**0.02**
PAH	Anthracene	µg/L	1	2.4		0.02 U	0.02 U	**0.03**	**0.11**	**3.4 A**	0.02 U	**0.04**		**0.052**	**1.19 D**	0.02 U	0.02 U	**0.1**	**1.44**	**0.25**	**0.12**	**0.14**	0.02 U	**0.03**	**0.06**
PAH	Benzo(a)anthracene	µg/L	1.8	4.7		0.02 U	0.02 U	**0.06**	**0.3**	**2.54**	**0.02**	**0.1**		**0.066**	**2.29 D**	0.02 U	0.02 U	**0.08**	**1.46**	**0.59**	**0.35**	**0.42**	0.02 U	**0.03**	**0.04**
PAH	Benzo(a)pyrene	µg/L	0.81	0.81		0.01 U	0.01 U	**0.06**	**0.27**	**1.79**	**0.01**	**0.08**		**0.05**	**2.08 D**	0.01 U	0.01 U	**0.06**	**1.2**	**0.76**	**0.35**	**0.42**	0.01 U	**0.08**	**0.01**
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75		0.02 U	0.02 U	**0.07**	**0.35**	**1.55**	0.02 U	**0.12**		**0.061**	**2.13 D**	0.02 U	0.02 U	**0.08**	**1.22**	**0.76**	**0.37**	**0.43**	0.02 U	**0.06**	**0.02**
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2		0.02 U	0.02 U	**0.04**	**0.18**	**0.83**	0.02 U	**0.06**		**0.032**	**1.22 D**	0.02 U	0.02 U	**0.04**	**0.59**	**0.44**	**0.21**	**0.25**	0.02 U	**0.05**	0.02 U
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4		0.02 U	0.02 U	**0.02**	**0.13**	**0.55**	0.02 U	**0.06**		**0.023**	**0.74 D**	0.02 U	0.02 U	**0.03**	**0.47**	**0.29**	**0.14**	**0.15**	0.02 U	**0.02**	0.02 U
PAH	Chrysene	µg/L	0.7	1		0.02 U	0.02 U	**0.07**	**0.29**	**2.93 A**	**0.02**	**0.16**		**0.077**	**2.75 D**	0.02 U	0.02 U	**0.12**	**1.85**	**0.85**	**0.44**	**0.52**	0.02 U	**0.04**	**0.05**
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52		0.02 U	0.02 U	0.02 U	**0.03**	**0.2**	0.02 U	0.02 U		0.02 U	**0.27 D**	0.02 U	0.02 U	0.02 U	**0.1**	**0.1**	**0.05**	**0.05**	0.02 U	0.02 U	0.02 U
PAH	Fluoranthene	µg/L	73	130		0.02 U	0.02 U	**0.14**	**0.6**	**4.76 A**	**0.04**	**0.22**		**0.158**	**4.05 D**	0.02 U	0.02 U	**0.29**	**3.35 A**	**1.08**	**0.5**	**0.57**	0.02 U	**0.05**	**0.11**
PAH	Fluorene	µg/L	290	400		0.02 U	0.02 U	**0.02**	**0.03**	**2.34**	0.02 U	0.02 U		**0.208**	**0.97 D**	0.02 U	0.02 U	**0.08**	**1.03**	**0.08**	0.06 U	0.07 U	0.02 U	0.02 U	**0.11**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2		0.02 U	0.02 U	**0.04**	**0.2**	**0.74**	0.02 U	**0.06**		**0.032**	**1.09 D**	0.02 U	0.02 U	**0.04**	**0.49**	**0.41**	**0.2**	**0.23**	0.02 U	**0.04**	0.02 U
PAH	Naphthalene	µg/L	1400	1400		0.05 U	0.05 U	0.05 U	0.05 U	**0.7**	0.05 U	0.05 U		1 U	1 U	0.05 U	0.05 U	0.05 U	**0.07**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.27**
PAH	Phenanthrene	µg/L	380	580		**0.02**	**0.02**	**0.1**	**0.26**	**12.6 A**	**0.06**	**0.11**		**0.125**	**1.02 D**	0.02 U	0.02 U	**0.33**	**4.79 A**	**1.13**	**0.24**	**0.27**	0.02 U	**0.07**	**0.3**
PAH	Pyrene	µg/L	5.7	68		0.02 U	0.02 U	**0.13**	**0.67**	**7.76 A**	**0.05**	**0.35**		**0.201**	**5.65 D**	0.02 U	0.02 U	**0.33**	**5.12 A**	**1.43**	**0.89**	**1.01**	0.02 U	**0.05**	**0.17**
PHC	F1 (C6-C10)	µg/L	420	750		25 U	25 U	25 U	25 U	**53**	25 U	25 U	**443**	**399**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**51**
PHC	F1-BTEX	µg/L	420	750		25 U	25 U	25 U	25 U	**53**	25 U	25 U	**361**	**337**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	**50**
PHC	F2 (C10-C16)	ug/g	1000000	1000000																					
PHC	F2 (C10-C16)	µg/L	150	150		100 U	100 U	100 U	100 U	**1140**	100 U	100 U	**1640**	**1020**	**2640**	100 U	100 U	100 U	**230**	100 U	100 U	**120**	100 U	100 U	100 U
PHC	F2-Naphth	µg/L	150	150		100 U	100 U	100 U	100 U	**1140**	100 U	100 U	**1640**	**1020**	**2640**	100 U	100 U	100 U	**220**	100 U	100 U	**120**	100 U	100 U	100 U
PHC	F3 (C16-C34)	ug/g	1000000	1000000																					
PHC	F3 (C16-C34)	µg/L	500	500		250 U	250 U	250 U	250 U	**2360**	250 U	250 U	**2030**	**1010**	**9220**	250 U	250 U	250 U	**1550**	**440**	**410**	**480**	250 U	250 U	250 U
PHC	F3-PAH	µg/L	500	500		250 U	250 U	250 U	250 U	**2330**	250 U	250 U	**2030**	**1010**	**9200**	250 U	250 U	250 U	**1530**	**440**	**410**	**470**	250 U	250 U	250 U
PHC	F4 (C34-C50)	µg/g	1000000	1000000																					
PHC	F4 (C34-C50)	µg/L	500	500		250 U	250 U	250 U	250 U	**650**	250 U	250 U	**490**	250 U	**3040**	250 U	250 U	250 U	**370**	**370**	250 U	250 U	250 U	250 U	250 U
PHC	F4G-SG	µg/L	500	500																					
PHC	Chrom. to baseline at nC50	None				No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L																							
PHC	Total Hydrocarbons (C6-C50)	µg/L				370 U	370 U	370 U	370 U	**4200**	370 U	370 U	**4610**	**2430**	**14900**	370 U	370 U	370 U	**2150**	**810**	**410**	**600**	370 U	370 U	370 U
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	1,1,1-Trichloroethane	µg/L	640	640		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	1,1-Dichloroethane	µg/L	320	320		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	1,2-Dibromoethane	µg/L	0.25	0.25		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	1,2-Dichloropropane	µg/L	16	16		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	1,3-Dichlorobenzene	µg/L	7600	9600		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.85 U
VOC	1,4-Dichlorobenzene	µg/L	8	8		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	2-Butanone	µg/L	470000	470000		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	40 U

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW36A-15	MW36B-15	MW36C-15	MW36D-15	MW37B-15	MW37C-15	MW37D-15	MW38A-15	MW38B-15	MW38C-15	MW39A-15	MW39B-15	MW39C-15	MW39D-15	MW3A-15	MW3B-15	MW3B-15	MW40A-15	MW40B-15	MW40C-15
					Sample ID	GW-11102463-081415-JC 520	GW-11102463-081315-JC 517	GW-11102463-081315-JC 516	GW-11102463-081315-JC 515	GW-11102463-082415-JC 551	GW-11102463-082415-JC 552	GW-11102463-082415-JC 553	GW-11102463-111615-TB-MW38A-15	GW-11102463-111615-TB-MW38B-15	GW-11102463-111615-TB-MW38C-15	GW-11102463-082715-JC 576	GW-11102463-082715-JC 577	GW-11102463-082715-JC 579	GW-11102463-082715-JC 578	GW-11102463-081715-JC 524	GW-11102463-081715-JC 522	GW-11102463-081715-JC 523	GW-11102463-080615-JC 510	GW-11102463-080615-JC 507	GW-11102463-080615-JC 509
					Start Depth (mbgs)	18.49	7.62	3.05	1.52	7.62	4.57	1.52	7.92	4.87	1.52	12.8	7.62	4.57	1.52	4.57	1.52	1.52	13.2	7.67	3.05
					End Depth (mbgs)	21.54	10.67	6.1	3.05	10.67	7.62	3.05	9.14	6.4	3.04	15.85	10.67	7.62	3.05	7.62	3.05	3.05	16.24	10.67	6.1
					Date	14 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	16 Nov 2015	16 Nov 2015	16 Nov 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	27 Aug 2015	17 Aug 2015	17 Aug 2015	17 Aug 2015	06 Aug 2015	06 Aug 2015	06 Aug 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	40 U
VOC	Acetone	µg/L	100000	130000		30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	60 U
VOC	Benzene	µg/L	44	44		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**71.4**	**53.9**	**0.52**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Bromodichloromethane	µg/L	67000	85000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
VOC	Bromoform	µg/L	380	380		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
VOC	Bromomethane	µg/L	5.6	5.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Carbon tetrachloride	µg/L	0.79	0.79		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
VOC	Chlorobenzene	µg/L	500	630		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	Chlorodibromomethane	µg/L	65000	82000		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
VOC	Chloroform	µg/L	2.4	2.4		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
VOC	Dichlorodifluoromethane	µg/L	3500	4400		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
VOC	Dichloromethane	µg/L	610	610		5 U	5 U	5 U	**5.4**	5 U	5 U	**6.9**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U
VOC	Ethylbenzene	µg/L	1800	2300		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
VOC	n-Hexane	µg/L	51	51		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2.25**	**1.87**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Styrene	µg/L	1300	1300		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	Tetrachloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Toluene	µg/L	14000	18000		0.5 U	0.5 U	**0.61**	**0.97**	0.5 U	0.5 U	0.5 U	**3.93**	**3.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
VOC	Trichloroethylene	µg/L	1.6	1.6		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Trichlorofluoromethane	µg/L	2000	2500		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U
VOC	Vinyl Chloride	µg/L	0.5	0.5		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
VOC	Xylene, o	µg/L	3300	4200		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**1.01**	**1.07**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
VOC	Xylenes, m & p	µg/L	3300	4200		0.4 U	0.4 U	0.4 U	**0.45**	0.4 U	0.4 U	0.4 U	**5.66**	**4.22**	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**1.16 D**
VOC	Xylenes, Total	µg/L	3300	4200		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**6.67**	**5.29**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.2**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,
Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards
in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW40D-15	MW41-15	MW41-15	MW5A-15	MW5B-15	MW6A-15	MW6B-15	MW7A-15	MW7B-15	MW8A-15	MW8B-15	MW8B-15	MW9A-15	MW9A-15	MW9B-15	TP1	TP2	TP3	TP4	TP5
					Sample ID	GW-11102463-080615-JC-508	GW-11102463-111715-BF-DUP2	GW-11102463-111715-BF-MW41-15	GW-11102463-081915-JC-535	GW-11102463-081915-JC-534	GW-11102463-081315-JC-514	GW-11102463-081315-JC-513	GW-11102463-081315-JC-519	GW-11102463-081315-JC-518	GW-11102463-081915-JC-528	GW-11102463-081915-JC-529	GW-11102463-081915-JC-530	GW-11102463-082415-JC-548	GW-11102463-082415-JC-549	GW-11102463-082415-JC-550	W.11102463.121015.KM-V-TP1	W.11102463.121015.KM-V-TP2	W.11102463.121115.KM-V-TP3	W.11102463.121115.KM-V-TP4	W.11102463.121115.KM-V-TP5
					Start Depth (mbgs)	1.52	4.26	4.26	3.81	1.52	3.66	1.52	4.57	1.52	3.05	1.52	1.52	4.42	4.42	1.52					
					End Depth (mbgs)	3.05	7.31	7.31	6.86	3.05	7.32	3.05	7.62	3.05	6.1	3.05	3.05	7.47	7.47	3.05					
					Date	06 Aug 2015	17 Nov 2015	17 Nov 2015	19 Aug 2015	19 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	10 Dec 2015	10 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
CHEMISTRY	pH	pH UNITS			**7.71**	**7.15**	**7.14**	**7.84**	**7.79**	**7.41**	**7.75**	**7.77**	**8.45**	**7.98**	**8.09**	**8.07**	**7.32**	**7.4**	**7.44**					
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	1 U	0.1 U	0.1 U	0.1 U	**0.14**	0.1 U	0.1 U	0.1 U	**0.49**	0.1 U	**0.26**	**0.28**	1 U	1 U	0.1 U					
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**1.1 D**	**0.63**	**0.6**	**3.48**	**5.4**	**8.72**	**3.67**	**0.26**	**6.46**	**1.46**	**2.03**	**2.07**	**1.5 M**	**1.4 M**	**0.95**					
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**269 D**	**342**	**334**	**190**	**97.3**	**225**	**150**	**193**	**16.2**	**590**	**389**	**373**	**172 M**	**176 M**	**169**					
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	1 U	0.1 U					
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**550 D**	**156**	**153**	**92**	**92**	**152**	**144**	**86**	**93**	**485**	**508**	**480**	100 U	100 U	**65**					
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.01 U					
INORGANIC	Chloride (Cl)	mg/L	1800	2300		**58 D**	**59 D**																	
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000	**39300 D**			**166000**	**31300**	**230000 D**	**291000 D**	**528000 D**	**82300**	**314000**	**358000**	**340000**	**2550000 A**	**1420000 A**	**193000 A**					
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	5 U	**1.04**	**0.9**	0.5 U	**0.6**	**0.55**	**0.53**	**0.73**	**0.68**	**0.87**	**0.71**	**0.72**	5 U	5 U	**0.58**					
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U					
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	**6.4 D**	**0.75**	**0.74**	**0.31**	**0.62**	**1.94**	**2.85**	**0.34**	**0.36**	**0.21**	**0.21**	**0.22**	1 U	1 U	**0.19**					
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	2 U	0.2 U	0.2 U	**0.2**	**0.77**	0.2 U	**0.3**	**0.69**	**5.81**	0.2 U	0.2 U	0.2 U	2 U	2 U	**0.23**					
INORGANIC	Electrical Conductivity	mS/cm			**1.94**	**1.4**	**1.4**	**1.67**	**0.9**	**2.09**	**1.98**	**2.43**	**0.87**	**1.75**	**1.99**	**1.89**	**5.54**	**5.51**	**1.48**					
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	**0.58 D**	0.05 U	0.05 U	0.05 U	**0.06**	0.05 U	0.05 U	**0.07**	**1.08**	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	**0.06**					
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U					
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**1.6 D**	**2.52**	**2.5**	**2.03**	**1.86**	**1.68**	**0.59**	**1.35**	**3.03**	**0.23**	**0.39**	**0.47**	0.5 U	0.5 U	**0.16**					
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	5 U	0.5 U	0.5 U	**0.6**	**0.82**	**0.68**	**2.35**	**3.12**	**1.54**	0.5 U	0.5 U	0.5 U	**5.2 M**	5 U	**1.51**					
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	0.5 U	**0.164**	**0.195**	**0.07**	**0.08**	**0.06**	**0.05**	**0.1**	**2.13**	**0.97**	**0.95**	**1.03**	0.5 U	0.5 U	**0.14**					
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	0.05 U					
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**96300 D**	**66400**	**64800**	**165000 D**	**42800**	**169000 D**	**168000 D**	**297000 D**	**187000 D**	**137000 D**	**162000 D**	**167000 D**	**639000 M**	**598000 M**	**84400**					
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.1 U	0.01 U					
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420	**7.22 D**	**0.027**	**0.024**	**0.84**	**0.87**	**1.34**	**0.5**	**0.14**	**0.42**	**0.1**	**0.17**	**0.19**	**0.31 M**	**0.36 M**	**0.14**					
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	5 U	**0.56**	**0.51**	0.5 U	**0.59**	0.5 U	0.5 U	0.5 U	**2.99**	**0.73**	**1.21**	**1.23**	5 U	5 U	**0.75**					
INORGANIC	WAD Cyanide	µg/L	52	66	2 U	2 U	2 U	**12.4**	**24.3**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U					
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	10 U	**2.9**	**3**	**2.1**	**5.3**	**1.4**	**4**	**4.7**	**4.7**	**1.3**	1 U	1 U	10 U	10 U	**3.2**					
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800	**1**	**0.717**	**0.695**	**0.07**	0.028 U	**0.08**	0.028 U	0.028 U	**0.22**	**1.28**	**10.7**	**16.6**	**0.18**	**0.12**	**0.15**					
PAH	1-Methylnaphthalene	µg/L	1500	1800	**0.69 D**	**0.656**	**0.618**	**0.07**	0.02 U	**0.02**	0.02 U	0.02 U	**0.08**	**0.89**	**6.03 D**	**9.49 D**	**0.09**	**0.06**	**0.07**					
PAH	2-Methylnaphthalene	µg/L	1500	1800	**0.31 D**	**0.061**	**0.076**	0.02 U	0.02 U	**0.05**	0.02 U	0.02 U	**0.13**	**0.38**	**4.71 D**	**7.09 D**	**0.09**	**0.06**	**0.07**					
PAH	Acenaphthene	µg/L	600	600	**0.81 D**	**2.47**	**2.27**	**1.04**	0.02 U	0.02 U	0.02 U	0.02 U	**0.05**	**1.79**	**6.9 D**	**8.5 D**	**0.91**	**0.48**	**0.85**					
PAH	Acenaphthylene	µg/L	1.4	1.8	**0.17 D**	0.05 U	0.045 U	**0.12**	0.02 U	0.02 U	0.02 U	0.02 U	**0.13**	**0.36**	**2.56 D**	**3.84 D**	**0.27**	**0.14**	**0.27**					
PAH	Anthracene	µg/L	1	2.4	**0.53 D**	**0.057**	**0.087**	**0.47**	0.02 U	0.02 U	**0.02**	0.02 U	**0.24**	**1.06**	**1.17 D**	**1.28 D**	**0.49**	**0.27**	**0.26**					
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.44 D**	**0.048**	**0.037**	**0.24**	**0.02**	0.02 U	**0.09**	0.02 U	**0.49**	**0.87**	**0.28**	**0.33**	**0.66**	**0.31**	**0.43**					
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**0.25 D**	**0.024**	**0.02**	**0.2**	**0.02**	0.01 U	**0.07**	0.01 U	**0.46**	**0.56**	**0.17**	**0.19**	**0.5**	**0.25**	**0.49**					
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	**0.27 D**	**0.029**	**0.024**	**0.18**	**0.02**	0.02 U	**0.1**	0.02 U	**0.57**	**0.72 D**	**0.24**	**0.28**	**0.47**	**0.24**	**0.43**					
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**0.19 D**	0.02 U	0.02 U	**0.11**	0.02 U	0.02 U	**0.06**	0.02 U	**0.33**	**0.31**	**0.1**	**0.11**	**0.23**	**0.12**	**0.27**					
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	0.1 U	0.02 U	0.02 U	**0.06**	0.02 U	0.02 U	**0.04**	0.02 U	**0.2**	**0.25 D**	**0.06**	**0.06**	**0.17**	**0.09**	**0.16**					
PAH	Chrysene	µg/L	0.7	1	**0.55 D**	**0.058**	**0.048**	**0.27**	**0.02**	0.02 U	**0.09**	0.02 U	**0.67**	**0.95**	**0.35**	**0.43**	**0.83**	**0.38**	**0.59**					
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	0.1 U	0.02 U	0.02 U	**0.02**	0.02 U	0.02 U	0.02 U	0.02 U	**0.07**	**0.07**	**0.02**	**0.03**	**0.05**	**0.03**	**0.06**					
PAH	Fluoranthene	µg/L	73	130	**1.27 D**	**0.125**	**0.12**	**0.59**	**0.03**	0.02 U	**0.13**	0.02 U	**0.91**	**2.28**	**1.42**	**1.39**	**1.3**	**0.68**	**1.17**					
PAH	Fluorene	µg/L	290	400	**0.48 D**	**0.213**	**0.198**	**0.54**	0.02 U	0.02 U	0.02 U	0.02 U	**0.06**	**1.16**	**8.42 D**	**10.2 D**	**0.21**	**0.12**	**0.34**					
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**0.17 D**	0.02 U	0.02 U	**0.09**	0.02 U	0.02 U	**0.06**	0.02 U	**0.33**	**0.29**	**0.09**	**0.11**	**0.2**	**0.1**	**0.23**					
PAH	Naphthalene	µg/L	1400	1400		**0.139**	**0.159**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.05**	**1.88**	**12.9 D**	**20 D**	**0.05**	0.05 U	**0.07**					
PAH	Phenanthrene	µg/L	380	580	**1.77 D**	**0.249**	**0.337**	**1.55**	**0.02**	**0.02**	**0.07**	0.02 U	**0.41**	**4.96 D**	**10.2 D**	**11.6 D**	**1.39**	**0.8**	**0.38**					
PAH	Pyrene	µg/L	5.7	68	**1.83 D**	**0.164**	**0.125**	**0.87**	**0.04**	0.02 U	**0.13**	**0.02**	**1.2**	**2**	**1.09**	**1.18**	**1.94**	**1.01**	**1.61**					
PHC	F1 (C6-C10)	µg/L	420	750	**450**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U					
PHC	F1-BTEX	µg/L	420	750	**446**	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U					
PHC	F2 (C10-C16)	ug/g	1000000	1000000																				
PHC	F2 (C10-C16)	µg/L	150	150	**660**	**2040**	**1850**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**210**	**210**	**120**	**160**	**170**	**47000**	**33000**	**330000**	**900000**	**33000**
PHC	F2-Naphth	µg/L	150	150	**660**	**2040**	**1850**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**200**	**190**	**120**	**160**	**170**					
PHC	F3 (C16-C34)	ug/g	1000000	1000000																				
PHC	F3 (C16-C34)	µg/L	500	500	**300**	**1990**	**1880**	250 U	250 U	250 U	250 U	250 U	**540**	**300**	250 U	250 U	**670**	**710**	**780**	**170000**	**13000**	**77000**	**1500000**	**47000**
PHC	F3-PAH	µg/L	500	500	**290**	**1990**	**1880**	250 U	250 U	250 U	250 U	250 U	**540**	**290**	250 U	250 U	**660**	**710**	**780**					
PHC	F4 (C34-C50)	µg/g	1000000	1000000																				
PHC	F4 (C34-C50)	µg/L	500	500	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	**420**	250 U	250 U	250 U	250 U	250 U	250 U	**82000**	**4200**	**4200**	**350000**	**6900**
PHC	F4G-SG	µg/L	500	500																**250000**				
PHC	Chrom. to baseline at nC50	None			No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	**YES**	No	No	No	No
PHC	Motor Oil Range Organics (C24-C36)	µg/L																		**170000**	**9200**	**11000**	**840000**	**32000**
PHC	Total Hydrocarbons (C6-C50)	µg/L			**1410**	**4030**	**3730**	370 U	370 U	370 U	370 U	370 U	**960**	370 U	370 U	370 U	**780**	**870**	**950**					
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,1,1-Trichloroethane	µg/L	640	640	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,1-Dichloroethane	µg/L	320	320	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U					
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,2-Dichloropropane	µg/L	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	1,4-Dichlorobenzene	µg/L	8	8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	2-Butanone	µg/L	470000	470000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U					

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MW40D-15	MW41-15	MW41-15	MW5A-15	MW5B-15	MW6A-15	MW6B-15	MW7A-15	MW7B-15	MW8A-15	MW8B-15	MW8B-15	MW9A-15	MW9A-15	MW9B-15	TP1	TP2	TP3	TP4	TP5
					Sample ID	GW-11102463-080615-JC-508	GW-11102463-111715-BF-DUP2	GW-11102463-111715-BF-MW41-15	GW-11102463-081915-JC-535	GW-11102463-081915-JC-534	GW-11102463-081315-JC-514	GW-11102463-081315-JC-513	GW-11102463-081315-JC-519	GW-11102463-081315-JC-518	GW-11102463-081915-JC-528	GW-11102463-081915-JC-529	GW-11102463-081915-JC-530	GW-11102463-082415-JC-548	GW-11102463-082415-JC-549	GW-11102463-082415-JC-550	W.11102463.121015.KM-V-TP1	W.11102463.121015.KM-V-TP2	W.11102463.121115.KM-V-TP3	W.11102463.121115.KM-V-TP4	W.11102463.121115.KM-V-TP5
					Start Depth (mbgs)	1.52	4.26	4.26	3.81	1.52	3.66	1.52	4.57	1.52	3.05	1.52	1.52	4.42	4.42	1.52					
					End Depth (mbgs)	3.05	7.31	7.31	6.86	3.05	7.32	3.05	7.62	3.05	6.1	3.05	3.05	7.47	7.47	3.05					
					Date	06 Aug 2015	17 Nov 2015	17 Nov 2015	19 Aug 2015	19 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	13 Aug 2015	19 Aug 2015	19 Aug 2015	19 Aug 2015	24 Aug 2015	24 Aug 2015	24 Aug 2015	10 Dec 2015	10 Dec 2015	11 Dec 2015	11 Dec 2015	11 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U					
VOC	Acetone	µg/L	100000	130000	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U					
VOC	Benzene	µg/L	44	44	0.5 U	**1.61**	**1.47**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.63**	**0.69**	0.5 U					
VOC	Bromodichloromethane	µg/L	67000	85000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U					
VOC	Bromoform	µg/L	380	380	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U					
VOC	Bromomethane	µg/L	5.6	5.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Carbon tetrachloride	µg/L	0.79	0.79	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U					
VOC	Chlorobenzene	µg/L	500	630	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Chlorodibromomethane	µg/L	65000	82000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U					
VOC	Chloroform	µg/L	2.4	2.4	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U					
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**474**	**437 A**	**0.5**					
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U					
VOC	Dichlorodifluoromethane	µg/L	3500	4400	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U					
VOC	Dichloromethane	µg/L	610	610	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U					
VOC	Ethylbenzene	µg/L	1800	2300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U					
VOC	n-Hexane	µg/L	51	51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Styrene	µg/L	1300	1300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Tetrachloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Toluene	µg/L	14000	18000	**1.34**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.81**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**8.95**	**10.3**	0.5 U					
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U					
VOC	Trichloroethylene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Trichlorofluoromethane	µg/L	2000	2500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U					
VOC	Vinyl Chloride	µg/L	0.5	0.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**522**	**505 A**	**0.61**					
VOC	Xylene, o	µg/L	3300	4200	**0.46**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U					
VOC	Xylenes, m & p	µg/L	3300	4200	**2.12**	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U					
VOC	Xylenes, Total	µg/L	3300	4200	**2.58**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,
Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards
in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils.
Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

				Location	**TP6**
				Sample ID	W.1110246 3.121015.KM V-TP6
				Start Depth (mbgs)	
				End Depth (mbgs)	
				Date	10 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**	
CHEMISTRY	pH	pH UNITS			
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	
INORGANIC	Chloride (Cl)	mg/L	1800	2300	
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000	
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	
INORGANIC	Electrical Conductivity	mS/cm			
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	
INORGANIC	Mercury, dissolved	µg/L	0.29	0.29	
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	
INORGANIC	Uranium (U)-Dissolved	µg/L	330	420	
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	
INORGANIC	WAD Cyanide	µg/L	52	66	
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	
PAH	1+2-Methylnaphthalenes	µg/L	1500	1800	
PAH	1-Methylnaphthalene	µg/L	1500	1800	
PAH	2-Methylnaphthalene	µg/L	1500	1800	
PAH	Acenaphthene	µg/L	600	600	
PAH	Acenaphthylene	µg/L	1.4	1.8	
PAH	Anthracene	µg/L	1	2.4	
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	
PAH	Chrysene	µg/L	0.7	1	
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	
PAH	Fluoranthene	µg/L	73	130	
PAH	Fluorene	µg/L	290	400	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	
PAH	Naphthalene	µg/L	1400	1400	
PAH	Phenanthrene	µg/L	380	580	
PAH	Pyrene	µg/L	5.7	68	
PHC	F1 (C6-C10)	µg/L	420	750	
PHC	F1-BTEX	µg/L	420	750	
PHC	F2 (C10-C16)	ug/g	1000000	1000000	
PHC	F2 (C10-C16)	µg/L	150	150	**8200**
PHC	F2-Naphth	µg/L	150	150	
PHC	F3 (C16-C34)	ug/g	1000000	1000000	
PHC	F3 (C16-C34)	µg/L	500	500	**410000**
PHC	F3-PAH	µg/L	500	500	
PHC	F4 (C34-C50)	µg/g	1000000	1000000	
PHC	F4 (C34-C50)	µg/L	500	500	**77000**
PHC	F4G-SG	µg/L	500	500	
PHC	Chrom. to baseline at nC50	None			No
PHC	Motor Oil Range Organics (C24-C36)	µg/L			**380000**
PHC	Total Hydrocarbons (C6-C50)	µg/L			
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	
VOC	1,1,1-Trichloroethane	µg/L	640	640	
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	
VOC	1,1-Dichloroethane	µg/L	320	320	
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	
VOC	1,2-Dichloropropane	µg/L	16	16	
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	
VOC	1,4-Dichlorobenzene	µg/L	8	8	
VOC	2-Butanone	µg/L	470000	470000	

Appendix A2-1. Summary of Groundwater Analytical Results

Port Lands, Toronto, ON

				Location	**TP6**
				Sample ID	W.11102463.121015.KMV-TP6
				Start Depth (mbgs)	
				End Depth (mbgs)	
				Date	10 Dec 2015
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**	
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	
VOC	Acetone	µg/L	100000	130000	
VOC	Benzene	µg/L	44	44	
VOC	Bromodichloromethane	µg/L	67000	85000	
VOC	Bromoform	µg/L	380	380	
VOC	Bromomethane	µg/L	5.6	5.6	
VOC	Carbon tetrachloride	µg/L	0.79	0.79	
VOC	Chlorobenzene	µg/L	500	630	
VOC	Chlorodibromomethane	µg/L	65000	82000	
VOC	Chloroform	µg/L	2.4	2.4	
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	
VOC	Dichlorodifluoromethane	µg/L	3500	4400	
VOC	Dichloromethane	µg/L	610	610	
VOC	Ethylbenzene	µg/L	1800	2300	
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	
VOC	n-Hexane	µg/L	51	51	
VOC	Styrene	µg/L	1300	1300	
VOC	Tetrachloroethene	µg/L	1.6	1.6	
VOC	Toluene	µg/L	14000	18000	
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	
VOC	Trichloroethylene	µg/L	1.6	1.6	
VOC	Trichlorofluoromethane	µg/L	2000	2500	
VOC	Vinyl Chloride	µg/L	0.5	0.5	
VOC	Xylene, o	µg/L	3300	4200	
VOC	Xylenes, m & p	µg/L	3300	4200	
VOC	Xylenes, Total	µg/L	3300	4200	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Conc

Blank cells indicate parameter was not analyzed

Start and end depth refer to the screened interval of the monitoring well

µg/g - microgram per gram

µg/L – microgram per litre

A - Detection limit adjusted for required dilution

D - Dilution required do to high concentration of test analyte

M - Detection limit adjusted due to matrix interference

mbgs – metre below ground surface

mg/L - milligram per litre

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-149D	CH2MHILL BH-149S	CH2MHILL BH-150D	CH2MHILL BH-150S	CH2MHILL BH-153	CH2MHILL BH-154	CH2MHILL BH-155	CH2MHILL BH-158	CH2MHILL BH-160	CH2MHILL BH-161	CH2MHILL BH-162	CH2MHILL BH-165	CH2MHILL BH-166D	CH2MHILL BH-166S	CH2MHILL BH-167	CH2MHILL BH-168	CH2MHILL BH-169	CH2MHILL BH-171	CH2MHILL BH-175	CH2MHILL BH-178	CH2MHILL BH-179	CH2MHILL MW10	CH2MHILL MW11	CH2MHILL MW12
					Sample ID	BH-149D	BH-149S	BH-150D	BH-150S	BH-153	BH-154	BH-155	BH-158	BH-160	BH-161	BH-162	BH-165	BH-166D	BH-166S	BH-167I	BH-168	BH-169	BH-171	BH-175	BH-178	BH-179	MW10	MW11	MW12
					Start Depth (mbgs)	3.9	0.65	7.3	0.6	0.65	0.65	0.65	0.65	1	0.85	0.85	0.85	4.6	0.6	0.8	0.65	0.9	0.9	0.9	0.65	0.6	1.5	0.66	1.66
					End Depth (mbgs)	7.01	3.65	8.84	5.18	3.65	3.65	3.65	3.65	3.65	3.66	3.65	3.65	6.1	4.27	1.4	3.65	4	3.9	3.9	3.65	3.6	3.66	3.66	3.66
					Date	28 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	31 Jan 2005	31 Jan 2005	26 Jan 2005	31 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	31 Jan 2005	28 Aug 2006	28 Aug 2006	28 Aug 2006
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																									
ABN	1,2,4-Trichlorobenzene	µg/L	180	180																									
ABN	2,4-Dimethylphenol	µg/L	31000	39000																									
ABN	2,4-Dinitrophenol	µg/L	9000	11000																									
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																									
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																									
ABN	2-Chlorophenol	µg/L	2600	3300																									
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																									
ABN	4-Chloroaniline	µg/L	320	400																									
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																									
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																									
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																									
ABN	Diethylphthalate	µg/L	30	38																									
ABN	Dimethylphthalate	µg/L	30	38																									
ABN	Phenol	µg/L	9600	12000																									
BIOLOGICAL	Fecal coliform	µg/L																											
CHEMISTRY	Biochemical Oxygen Demand	µg/L																											
CHEMISTRY	Lab pH	pH UNITS																											
CHEMISTRY	Moisture, percent	%																											
CHEMISTRY	Nitrate (as N)	µg/L																											
Chemistry	Nitrate as N	µg/L																											
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L																											
CHEMISTRY	Nitrite (as N)	µg/L																											
CHEMISTRY	Total Suspended Solids	µg/L																											
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																									
CP	2,4,6-Trichlorophenol	µg/L	180	230																									
CP	2,4-Dichlorophenol	µg/L	3700	4600																									
CP	Pentachlorophenol	µg/L	50	62																									
INORGANIC	Antimony	µg/L	16000	20000	**2**	1 U	1 U	**3**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U			
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000																									
INORGANIC	Arsenic	µg/L	1500	1900	**4**	**4**	**1**	**2**	**3**	**4**	**7**	**2**	1 U	1 U	**2**	**4**	**3**	**7**		**3**	**2**	**2**	**3**	**2**	**2**			
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900																									
INORGANIC	Barium	µg/L	23000	29000	**333.99**	**239.99**	**272**	**162**	**164**	**242**	**231**	**108**	**202.99**	**47.89**	**208**	**180**	**470**	**272**		**199**	**142**	**242**	**48.5**	**280.99**	**180.99**			
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000																									
INORGANIC	Beryllium	µg/L	53	67	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U			
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67																									
INORGANIC	Boron	µg/L	36000	45000	**108**	**345**	**19.2**	**176**	**423**	**200**	**933**	**958**	**638**	**330**	**924**	**497**	**1270**	**1530**		**501.99**	**423**	**449.99**	**245**	**308**	**1179.99**			
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000																									
INORGANIC	Cadmium	µg/L	2.1	2.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U			
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7																									
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000																									
INORGANIC	Chromium	µg/L	640	810	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	2 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U		4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U			
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810																									
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140							4.99 U																		
INORGANIC	Cobalt	µg/L	52	66	**3**	**1**	1 U	**8**	1 U	**1**	**2**	**7**	1 U	1 U	1 U	**2**	**1**	**4.99**		**12.4**	1 U	1 U	**2**	**4**	**3**			
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66																									
INORGANIC	Copper	µg/L	69	87	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	**10.4**	3 U	3 U	3 U	3 U		3 U	3 U	3 U	3 U	3 U	3 U			
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87																									
INORGANIC	Cyanide	µg/L	52	66																									
INORGANIC	Electrical Conductivity	ms/cm																											
INORGANIC	Lead	µg/L	20	25	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**4**	2 U	2 U	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	1 U			
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25																									
INORGANIC	Mercury	µg/L	0.29	0.29	**1**	**17.1**	**0.09**	**12.8**	**10.6**	**3**	**0.6**	**1.1**	**0.39**	0.09 U	**0.5**	**0.89**	**8.39**	**1.6**		**0.5**	0.09 U	0.19 U	**0.09**	**0.09**	**1**			
INORGANIC	Molybdenum	µg/L	7300	9200	**3**	**4**	**2**	**16.1**	1 U	1 U	**2**	**6**	1 U	**4**	1 U	**2**	1 U	**13.7**		**8.99**	**3**	**2**	**8**	**6**	**3**			
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200																									
INORGANIC	Nickel	µg/L	390	490	1 U	1 U	1 U	**4.99**	1 U	1 U	1 U	**6**	1 U	1 U	1 U	1 U	1 U	**4**		**8**	1 U	**4.99**	**4**	**4**	**1**			
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490																									
INORGANIC	Selenium	µg/L	50	63	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	2 U			
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63																									
INORGANIC	Silver	µg/L	1.2	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U			
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5																									
INORGANIC	Sodium	µg/L	1800000	2300000	**58200**	**66800**	**26500**	**41099.99**	**79099.99**	**79099.99**	**110000**	**175000**	**94300**	**31299.99**	**117000**	**78599.99**	**120000**	**83500**		**43200**	**63500**	**163000**	**112000**	**128000**	**89000**			
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000																									
INORGANIC	Sodium Absorption Ratio	None																											
INORGANIC	Thallium	µg/L	400	510	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U			
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510																									
INORGANIC	Uranium (U)	µg/L	330	420																									
INORGANIC	Vanadium	µg/L	200	250	**1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2**	1 U	1 U	1 U	1 U	**1**		1 U	**2**	**2**	**2**	1 U	1 U			
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250																									
INORGANIC	Zinc	µg/L	890	1100	**10.1**	4.99 U	**8**	**15.2**	**7**	**10.2**	**7**	**23.1**	11.7 U	**5.9**	**8.99**	**7**	**7**	**12.8**		**13**	4.99 U	**16.1**	**13.5**	**20**	**7**			
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100																									

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	CH2MHILL BH-149D	CH2MHILL BH-149S	CH2MHILL BH-150D	CH2MHILL BH-150S	CH2MHILL BH-153	CH2MHILL BH-154	CH2MHILL BH-155	CH2MHILL BH-158	CH2MHILL BH-160	CH2MHILL BH-161	CH2MHILL BH-162	CH2MHILL BH-165	CH2MHILL BH-166D	CH2MHILL BH-166S	CH2MHILL BH-167	CH2MHILL BH-168	CH2MHILL BH-169	CH2MHILL BH-171	CH2MHILL BH-175	CH2MHILL BH-178	CH2MHILL BH-179	CH2MHILL MW10	CH2MHILL MW11	CH2MHILL MW12
					Sample ID	BH-149D	BH-149S	BH-150D	BH-150S	BH-153	BH-154	BH-155	BH-158	BH-160	BH-161	BH-162	BH-165	BH-166D	BH-166S	BH-167I	BH-168	BH-169	BH-171	BH-175	BH-178	BH-179	MW10	MW11	MW12
					Start Depth (mbgs)	3.9	0.65	7.3	0.6	0.65	0.65	0.65	0.65	1	0.85	0.85	0.85	4.6	0.6	0.8	0.65	0.9	0.9	0.9	0.65	0.6	1.5	0.66	1.66
					End Depth (mbgs)	7.01	3.65	8.84	5.18	3.65	3.65	3.65	3.65	3.65	3.66	3.65	3.65	6.1	4.27	1.4	3.65	4	3.9	3.9	3.65	3.6	3.66	3.66	3.66
					Date	28 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	31 Jan 2005	31 Jan 2005	26 Jan 2005	31 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	31 Jan 2005	28 Aug 2006	28 Aug 2006	28 Aug 2006
OCP	Hexachlorobenzene	µg/L	3.1	3.1																								
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																								
OCP	Hexachloroethane	µg/L	94	94																								
other SVOC	2-Chloronaphthalene	µg/L																										
other SVOC	2-Hexanone	µg/L																										
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																										
other SVOC	4-Chlorophenyl Phenylether	µg/L																										
other SVOC	Bis (2-chloroethoxy) methane	µg/L																										
other SVOC	Butyl benzyl phthalate	µg/L																										
other SVOC	Chloroethane	µg/L																										
other SVOC	Chloromethane	µg/L																										
other SVOC	Di-N-Butylphthalate	µg/L																										
other SVOC	Di-n-octyl phthalate	µg/L																										
other SVOC	Isophorone	µg/L																										
other SVOC	Nitrobenzene	µg/L																										
other SVOC	N-Nitrosodi-N-propylamine	µg/L																										
other SVOC	N-Nitrosodiphenylamine	µg/L																										
other SVOC	Perylene	µg/L																										
PAH	1-Methylnaphthalene	µg/L	1500	1800																								
PAH	2-Methylnaphthalene	µg/L	1500	1800																								
PAH	Acenaphthene	µg/L	600	600	**0.41**	**0.13**	0.04 U	0.04 U	0.04 U	**4.26**	**0.63**	**1.7**	**1.2**	**2.12**	**3.61**	**1.41**	**1.89**	**3.46**		**3.94**	**0.19**	**1.11**	**0.34**	**0.57**	**4.67**	0.09 U	0.09 U	0.09 U
PAH	Acenaphthylene	µg/L	1.4	1.8	**0.11**	**0.28**	0.04 U	0.04 U	0.04 U	**1.36**	0.04 U	**0.14**	**0.09**	**0.53**	**0.09**	**0.09**	0.04 U	**0.63**		0.04 U	0.04 U	**0.19**	0.04 U	0.04 U	**0.28**	0.11 U	0.11 U	0.11 U
PAH	Anthracene	µg/L	1	2.4	**0.6**	**0.49**	0.04 U	0.04 U	0.04 U	**2.27**	**0.11**	**0.34**	**0.53**	0.04 U	**0.73**	**0.49**	**0.41**	**2.46**		**0.63**	**0.07**	**0.29**	**0.14**	**0.07**	**0.73**	0.07 U	0.07 U	0.07 U
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.72**	**1.75**	0.04 U	0.04 U	0.04 U	**1.47**	**0.18**	**0.41**	**0.26**	**0.16**	**0.34**	**0.42**	**0.17**	**2.52**		**0.29**	**0.09**	**0.13**	**0.13**	0.04 U	**0.16**	0.07 U	0.07 U	0.07 U
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**0.47**	**1.68**	**0.03**	**0.01**	**0.02**	**0.92**	**0.07**	**0.25**	**0.15**	**0.07**	**0.23**	**0.22**	0.01 U	**2.32**		**0.17**	**0.04**	**0.05**	**0.05**	**0.03**	0.01 U	0.09 U	0.09 U	0.09 U
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75																								
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	**0.26**	**0.85**	0.04 U	0.04 U	0.04 U	**0.49**	0.04 U	**0.13**	0.05 U	0.04 U	**0.11**	**0.13**	0.04 U	**1.22**		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.02 U	0.02 U	0.02 U
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**0.3**	**0.89**	0.09 U	0.09 U	0.09 U	**0.5**	0.09 U	**0.09**	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	**1.2**		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.05 U	0.05 U	0.05 U
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**0.23**	**0.7**	0.04 U	0.04 U	0.04 U	**0.38**	0.04 U	**0.09**	0.04 U	0.04 U	**0.09**	**0.09**	0.04 U	**1.1**		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.05 U	0.05 U	0.05 U
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75	**0.28**	**0.85**	0.04 U	0.04 U	0.04 U	**0.5**	0.04 U	**0.11**					0.04 U	**1.25**		0.04 U				0.04 U	0.04 U			
PAH	Chrysene	µg/L	0.7	1	**0.62**	**2.44**	0.04 U	0.04 U	0.04 U	**1.16**	**0.09**	**0.36**	**0.23**	**0.09**	**0.31**	**0.39**	**0.09**	**2.46**		**0.25**	0.04 U	**0.05**	**0.07**	0.04 U	**0.11**	0.04 U	0.04 U	0.04 U
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	0.09 U	**0.19**	0.09 U	0.09 U	0.09 U	**0.09**	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	**0.19**		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
PAH	Fluoranthene	µg/L	73	130	**1.48**	**3.19**	**0.04**	0.04 U	**0.09**	**4.29**	**0.26**	**1.1**	**0.81**	**0.33**	**1.11**	**1.07**	**0.73**	**7.8**		**1.27**	**0.12**	**0.19**	**0.29**	**0.18**	**0.89**	0.12 U	0.12 U	0.12 U
PAH	Fluorene	µg/L	290	400	**0.42**	**0.13**	**0.07**	0.04 U	0.04 U	**7.18**	**0.15**	**0.31**	**0.79**	**3.7**	**1.65**	**0.75**	**0.91**	**2.33**		**1.78**	**0.12**	**0.66**	**0.25**	**0.13**	**1.61**	0.09 U	0.09 U	0.09 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**0.3**	**0.89**	0.09 U	0.09 U	0.09 U	**0.5**	0.09 U	**0.09**	0.09 U	0.01 U	0.09 U	0.09 U	0.09 U	**1.1**		0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.02 U	0.02 U	0.02 U
PAH	Naphthalene	µg/L	1400	1400	**0.3**	**0.09**	0.04 U	0.04 U	**0.07**	**136.99**	0.04 U	**0.17**	0.04 U	0.04 U	**51.6**	**0.19**	**110**	**138**		**155**	0.04 U	0.07 U	**0.19**	**0.1**	**64.3**	**0.19**	**0.18**	**0.17**
PAH	Phenanthrene	µg/L	380	580	**1.59**	**0.81**	**0.16**	0.04 U	0.04 U	**12.7**	**0.5**	**0.39**	**2.55**	**4.75**	**3.45**	**1.53**	**2.06**	**8.65**		**2.27**	**0.52**	**0.53**	**1.16**	**0.08**	**3.79**	0.11 U	0.11 U	0.11 U
PAH	Pyrene	µg/L	5.7	68	**1.23**	**3.68**	**0.05**	**0.07**	**0.17**	**4.16**	**0.31**	**1.32**	**0.79**	**0.38**	**1.06**	**1.13**	**0.63**	7.12		**1.23**	**0.13**	**0.25**	**0.3**	**0.17**	**0.89**	0.12 U	0.12 U	0.12 U
PCB	PCB, Total	µg/L	0.2	7.8																								
PHC	F1 (C6-C10)	µg/L	420	750	100 U	100 U	100 U	100 U	100 U	2000 U	100 U	100 U	**3599.99**	100 U	**10500**	100 U	**44200**	**56799.99**	**5969.99**	**103000**	100 U	100 U	100 U	100 U	**6540**	**360**	100 U	120 U
PHC	F1-BTEX	µg/L	420	750																								
PHC	F2 (C10-C16)	µg/L	150	150	100 U	100 U	**2200**	**829.99**	**9699.99**	**4300**	100 U	100 U	**899.99**	**3300**	**730**	100 U	**15000**	**5800**	**3400**	**2599.99**	100 U	**2599.99**	**100**	100 U	**800**	100 U	100 U	100 U
PHC	F3 (C16-C34)	µg/L	500	500	**759.99**	**500**	100 U	**200**	**14000**	**1100**	100 U	**130**	**190**	**2000**	**310**	**190**	**4000**	100 U	**349.99**	**239.99**	100 U	**2099.99**	**100**	100 U	**319.99**	500 U	500 U	500 U
PHC	F4 (C34-C50)	µg/L	500	500	**759.99**	**170**	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	**130**	100 U	**170**	100 U		180 U	**100**	100 U	100 U	500 U	500 U	500 U
PHC	Chrom. to baseline at nC50	None																										
SVOC	Benzo(e)pyrene	µg/L																										
SVOC	Hexachlorocyclopentadiene	µg/L																										
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,1,1-Trichloroethane	µg/L	640	640	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	39.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	1 U	1 U	1 U	1 U	1 U	22 U	1 U	1 U	1 U	1 U	430 U	1 U	430 U	430 U	8.7 U	870 U	1 U	1 U	1 U	1 U	1 U			
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	17.99 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,1-Dichloroethane	µg/L	320	320	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	8.7 U	0.39 U	0.39 U	0.39 U	0.39 U	170 U	0.39 U	170 U	170 U	8.7 U	349.99 U	0.39 U	0.39 U	0.39 U	0.39 U	**1.8**			
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	2.09 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	4.4 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,2-Dichloroethene (Total)	µg/L																										
VOC	1,2-Dichloropropane	µg/L	16	16	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	1,3-Dichloropropene	µg/L	5.2	5.2																								
VOC	1,4-Dichlorobenzene	µg/L	8	8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	2-Butanone	µg/L	470000	470000	15 U	15 U	15 U	15 U	15 U	330 U	15 U	15 U	15 U	15 U	6500 U	15 U	6500 U	6500 U	130 U	13000 U	15 U	15 U	15 U	15 U	15 U			
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U	220 U	9.99 U	9.99 U	9.99 U	9.99 U	4400 U	9.99 U	4400 U	4400 U	86.99 U	8699.99 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U			
VOC	Acetone	µg/L	100000	130000	**20**	15 U	15 U	15 U	15 U	330 U	15 U	15 U	15 U	15 U	6500 U	15 U	6500 U	6500 U	130 U	13000 U	15 U	15 U	15 U	15 U	**27**			
VOC	Benzene	µg/L	44	44	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	600 U	0.5 U	0.5 U	**53.8**	0.5 U	220 U	0.6 U	**220**	**280**	4.4 U	**884**	0.5 U	0.5 U	0.5 U	0.5 U	**270**	**68.99**	**0.47**	**79.99**
VOC	Bromodichloromethane	µg/L	67000	85000	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4.4 U	0.19 U	0.19 U	0.19 U	0.19 U	86.99 U	0.19 U	86.99 U	86.99 U	8.7 U	170 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U			
VOC	Bromoform	µg/L	380	380	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4.4 U	0.19 U	0.19 U	0.19 U	0.19 U	86.99 U	0.19 U	86.99 U	86.99 U	17.99 U	170 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U			
VOC	Bromomethane	µg/L	5.6	5.6	3 U	3 U	3 U	3 U	3 U	64.99 U	3 U	3 U	3 U	3 U	1300 U	3 U	1300 U	1300 U	17.99 U	2599.99 U	3 U	3 U	3 U	3 U	3 U			
VOC	Carbon tetrachloride	µg/L	0.79	0.79	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	Chlorobenzene	µg/L	500	630	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	4.4 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	Chlorodibromomethane	µg/L	65000	82000	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4.4 U	0.19 U	0.19 U	0.19 U	0.19 U	86.99 U	0.19 U	86.99 U	86.99 U	8.7 U	170 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U			
VOC	Chloroform	µg/L	2.4	2.4	0.19 U	0.19 U	**0.19**	0.19 U	0.19 U	4.4 U	0.19 U	0.19 U	0.19 U	0.19 U	86.99 U	0.19 U	86.99 U	86.99 U	8.7 U	170 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U			
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	1 U	1 U	1 U	1 U	1 U	22 U	1 U	1 U	1 U	1 U	430 U	1 U	430 U	430 U	8.7 U	**9699.99**	1 U	1 U	1 U	1 U	**100**			
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	3.1 U	0.14 U	0.14 U	0.14 U	0.14 U	61 U	0.14 U	61 U	61 U	4.4 U	120 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U			

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**CH2MHILL BH-149D**	**CH2MHILL BH-149S**	**CH2MHILL BH-150D**	**CH2MHILL BH-150S**	**CH2MHILL BH-153**	**CH2MHILL BH-154**	**CH2MHILL BH-155**	**CH2MHILL BH-158**	**CH2MHILL BH-160**	**CH2MHILL BH-161**	**CH2MHILL BH-162**	**CH2MHILL BH-165**	**CH2MHILL BH-166D**	**CH2MHILL BH-166S**	**CH2MHILL BH-167**	**CH2MHILL BH-168**	**CH2MHILL BH-169**	**CH2MHILL BH-171**	**CH2MHILL BH-175**	**CH2MHILL BH-178**	**CH2MHILL BH-179**	**CH2MHILL MW10**	**CH2MHILL MW11**	**CH2MHILL MW12**
					Sample ID	BH-149D	BH-149S	BH-150D	BH-150S	BH-153	BH-154	BH-155	BH-158	BH-160	BH-161	BH-162	BH-165	BH-166D	BH-166S	BH-167I	BH-168	BH-169	BH-171	BH-175	BH-178	BH-179	MW10	MW11	MW12
					Start Depth (mbgs)	3.9	0.65	7.3	0.6	0.65	0.65	0.65	0.65	1	0.85	0.85	0.85	4.6	0.6	0.8	0.65	0.9	0.9	0.9	0.65	0.6	1.5	0.66	1.66
					End Depth (mbgs)	7.01	3.65	8.84	5.18	3.65	3.65	3.65	3.65	3.65	3.66	3.65	3.65	6.1	4.27	1.4	3.65	4	3.9	3.9	3.65	3.6	3.66	3.66	3.66
					Date	28 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	28 Jan 2005	26 Jan 2005	26 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	31 Jan 2005	31 Jan 2005	26 Jan 2005	31 Jan 2005	25 Jan 2005	25 Jan 2005	25 Jan 2005	26 Jan 2005	31 Jan 2005	28 Aug 2006	28 Aug 2006	28 Aug 2006
VOC	Dichlorodifluoromethane	µg/L	3500	4400																								
VOC	Dichloromethane	µg/L	610	610	1 U	1 U	1 U	1 U	1 U	22 U	1 U	1 U	1 U	1 U	430 U	1 U	430 U	430 U	8.7 U	870 U	1 U	1 U	1 U	1 U	1 U			
VOC	Ethylbenzene	µg/L	1800	2300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	330 U	0.5 U	0.5 U	2 U	**3.7**	**2500**	1.2 U	**4900**	**7360**	**523.99**	**9520**	0.5 U	0.5 U	0.5 U	0.5 U	**544**	**0.6**	**0.28**	**0.16**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	2 U	2 U	2 U	2 U	2 U	43 U	2 U	2 U	2 U	2 U	870 U	2 U	870 U	870 U	17.99 U	1700 U	2 U	2 U	2 U	2 U	2 U			
VOC	n-Hexane	µg/L	51	51																								
VOC	Styrene	µg/L	1300	1300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	Tetrachloroethene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
VOC	Toluene	µg/L	14000	18000	0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	11 U	0.5 U	0.5 U	**10.2**	0.5 U	220 U	0.89 U	**9300**	**9540**	**280**	**46299.99**	0.5 U	0.5 U	0.5 U	0.6 U	**31.5**	**3.4**	0.19 U	**1.8**
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	1 U	1 U	1 U	1 U	1 U	22 U	1 U	1 U	1 U	1 U	430 U	1 U	130 U	130 U	8.7 U	870 U	1 U	1 U	1 U	1 U	**5.29**			
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	3.1 U	0.14 U	0.14 U	0.14 U	0.14 U	61 U	0.14 U	61 U	61 U	4.4 U	120 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U			
VOC	Trichloroethylene	µg/L	1.6	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	220 U	0.5 U	220 U	220 U	8.7 U	440 U	0.5 U	0.5 U	0.5 U	0.5 U					
VOC	Trichlorofluoromethane	µg/L	2000	2500																								
VOC	Vinyl Chloride	µg/L	0.5	0.5	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4.4 U	0.19 U	0.19 U	0.19 U	0.19 U	86.99 U	0.19 U	86.99 U	86.99 U	2.6 U	**870**	0.19 U	0.19 U	0.19 U	0.19 U	**37.99**			
VOC	Xylene, o	µg/L	3300	4200	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4 U	**0.39**	0.19 U	2 U	0.19 U	**990**	**1.5**	**5719.99**	**7320**	**319.99**	**10400**	0.19 U	0.19 U	0.19 U	0.19 U	**231.99**			
VOC	Xylenes, m & p	µg/L	3300	4200	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	8 U	**0.5**	0.39 U	**18.6**	**1.7**	**6320**	**3.19**	**13200**	**19900**	**1600**	**26600**	0.39 U	0.39 U	0.39 U	0.39 U	**3300**			
VOC	Xylenes, Total	µg/L	3300	4200	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	130 U	**0.89**	0.69 U	**18.6**	1.7 U	**7699.99**	**4.6**	**18900**	**27200**	**1920**	**37000**	0.69 U	0.69 U	0.69 U	0.69 U	**3530**	**7.19**	**0.29**	**0.76**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Condition.

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

		Location	**CH2MHILL MW12**	**CH2MHILL MW12**	**CH2MHILL MW13**	**CH2MHILL MW19**	**CH2MHILL MW4**	**CH2MHILL MW5**	**CH2MHILL MW6**	**CH2MHILL MW7**	**CH2MHILL MW9**	**DCS BH06-1**	**DCS BH06-2**	**DCS BH06-3**	**DCS BH06-7**	**DCS BH06-8**	**DCS BH06-9**	**DCS BH-102**	**DCS BH-103**	**DCS BH-105D**	**DCS BH-105D**	**DCS BH-107**	**DCS BH-111**	**DCS BH-111D**	**DCS BH-113**
		Sample ID	MW12I	MW12I	MW13	MW19	MW4	MW5	MW6	MW7	MW9	BH06-1	BH06-2	BH06-3	BH06-7	BH06-8	BH06-9	BH-102	BH-103	BH-105	BH-105 D	BH-107	BH-111	BH-111D	BH-113
		Start Depth (mbgs)	0.61	0.61	1.2	0.35	0.66	0.66	1.57	0.66	0.66	1.3	1.2	1.8	1.66	1.52	1.52	1	1	1	1	1	1	6.25	1
		End Depth (mbgs)	3.66	3.66	4.2	1.9	3.66	3.66	4.57	3.66	3.66	4.3	4.2	4.8	6.1	4.57	3.81	2.6	2.5	2.5	2.5	2.5	1.5	7.75	2.5
		Date	15 Aug 2006	16 Aug 2006	25 Oct 2006	11 Feb 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	27 Sep 1996	27 Sep 1996	26 Sep 1996	26 Sep 1996	26 Sep 1996	20 Nov 1996	20 Nov 1996	25 Sep 1996
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
ABN	1,2,4-Trichlorobenzene	µg/L	180	180			0.3 U	1.2 U																	
ABN	2,4-Dimethylphenol	µg/L	31000	39000																					
ABN	2,4-Dinitrophenol	µg/L	9000	11000																					
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																					
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																					
ABN	2-Chlorophenol	µg/L	2600	3300																					
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																					
ABN	4-Chloroaniline	µg/L	320	400																					
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																					
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																					
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																					
ABN	Diethylphthalate	µg/L	30	38																					
ABN	Dimethylphthalate	µg/L	30	38																					
ABN	Phenol	µg/L	9600	12000																					
BIOLOGICAL	Fecal coliform	µg/L																**0**				**0**			**0**
CHEMISTRY	Biochemical Oxygen Demand	µg/L																**49.4**				9.99 U			**50.29**
CHEMISTRY	Lab pH	pH UNITS																**6.46**				**6.88**			**6.44**
CHEMISTRY	Moisture, percent	%			**12.9**	**26.29**																			
CHEMISTRY	Nitrate (as N)	µg/L																							
Chemistry	Nitrate as N	µg/L																							
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L																							
CHEMISTRY	Nitrite (as N)	µg/L																							
CHEMISTRY	Total Suspended Solids	µg/L																**437**				**119**			**214**
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																					
CP	2,4,6-Trichlorophenol	µg/L	180	230																					
CP	2,4-Dichlorophenol	µg/L	3700	4600																					
CP	Pentachlorophenol	µg/L	50	62																					
INORGANIC	Antimony	µg/L	16000	20000				**2.21**						1 U	1 U	1 U	1 U	1 U	1 U							
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000																					
INORGANIC	Arsenic	µg/L	1500	1900				**7.61**						**2**	**3**	**1**	1 U	1 U	**2**							
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900																					
INORGANIC	Barium	µg/L	23000	29000				**96.6**						**300**	**220**	**349.99**	**270**	**259.99**	**319.99**							
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000																					
INORGANIC	Beryllium	µg/L	53	67				1 U																	
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67																					
INORGANIC	Boron	µg/L	36000	45000				**287.99**						**11000**	**899.99**	**78**	**190**	**340**	**319.99**							
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000																					
INORGANIC	Cadmium	µg/L	2.1	2.7				0.5 U						**0.19**	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.001 U				0.001 U			0.001 U
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7																					
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000																					
INORGANIC	Chromium	µg/L	640	810				**4.98**						4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	0.01 U				0.01 U			0.01 U
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810																					
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140																					
INORGANIC	Cobalt	µg/L	52	66				**0.73**						**23**	**0.89**	**17.99**	3 U	**0.5**	3 U							
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66																					
INORGANIC	Copper	µg/L	69	87				**1.77**						**20**	1 U	1 U	1 U	1 U	1 U	0.01 U				0.01 U			0.01 U
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87																					
INORGANIC	Cyanide	µg/L	52	66																					
INORGANIC	Electrical Conductivity	ms/cm																							
INORGANIC	Lead	µg/L	20	25				**0.82**						**1.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.01 U				0.01 U			0.01 U
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25																					
INORGANIC	Mercury	µg/L	0.29	0.29										0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U				0.0001 U			0.0001 U
INORGANIC	Molybdenum	µg/L	7300	9200				**3.64**						**4**	**4**	**15**	1 U	1 U	1 U							
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200																					
INORGANIC	Nickel	µg/L	390	490				**8.15**						**55**	**4.99**	**12**	4.99 U	1 U	**14**	0.04 U				0.04 U			0.04 U
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490																					
INORGANIC	Selenium	µg/L	50	63				0.79 U						2 U	2 U	2 U	2 U	2 U	2 U							
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63																					
INORGANIC	Silver	µg/L	1.2	1.5				0.5 U						0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U							
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5																					
INORGANIC	Sodium	µg/L	1800000	2300000										**240000**	**140000**	**210000**	**110000**	**50000**	**95000**							
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000																					
INORGANIC	Sodium Absorption Ratio	None																							
INORGANIC	Thallium	µg/L	400	510				0.5 U						0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U							
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510																					
INORGANIC	Uranium (U)	µg/L	330	420																					
INORGANIC	Vanadium	µg/L	200	250				**0.72**						**3**	**2**	1 U	1 U	**1**	**2**							
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250																					
INORGANIC	Zinc	µg/L	890	1100				**58.69**						**14**	4.99 U	**41.99**	4.99 U	**9.99**	4.99 U	0.01 U				**0.01**			**0.01**
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100																					

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	CH2MHILL	DCS BH06-1	DCS BH06-2	DCS BH06-3	DCS BH06-7	DCS BH06-8	DCS BH06-9	DCS BH-102	DCS BH-103	DCS BH-105D	DCS BH-105D	DCS BH-107	DCS BH-111	DCS BH-111D	DCS BH-113
					MW12	MW12	MW13	MW19	MW4	MW5	MW6	MW7	MW9	BH06-1	BH06-2	BH06-3	BH06-7	BH06-8	BH06-9	BH-102	BH-103	BH-105	BH-105 D	BH-107	BH-111	BH-111D	BH-113
					MW12I	MW12I	MW13	MW19	MW4	MW5	MW6	MW7	MW9	BH06-1	BH06-2	BH06-3	BH06-7	BH06-8	BH06-9	BH-102	BH-103	BH-105	BH-105 D	BH-107	BH-111	BH-111D	BH-113
					0.61	0.61	1.2	0.35	0.66	0.66	1.57	0.66	0.66	1.3	1.2	1.8	1.66	1.52	1.52	1	1	1	1	1	1	6.25	1
					3.66	3.66	4.2	1.9	3.66	3.66	4.57	3.66	3.66	4.3	4.2	4.8	6.1	4.57	3.81	2.6	2.5	2.5	2.5	2.5	1.5	7.75	2.5
					15 Aug 2006	16 Aug 2006	25 Oct 2006	11 Feb 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	27 Sep 1996	27 Sep 1996	26 Sep 1996	26 Sep 1996	26 Sep 1996	20 Nov 1996	20 Nov 1996	25 Sep 1996
OCP	Hexachlorobenzene	µg/L	3.1	3.1																							
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																							
OCP	Hexachloroethane	µg/L	94	94																							
other SVOC	2-Chloronaphthalene	µg/L																									
other SVOC	2-Hexanone	µg/L					0.3 U	1.2 U																			
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																									
other SVOC	4-Chlorophenyl Phenylether	µg/L																									
other SVOC	Bis (2-chloroethoxy) methane	µg/L																									
other SVOC	Butyl benzyl phthalate	µg/L																									
other SVOC	Chloroethane	µg/L					**0.76**	0.79 U																	0.19 U	0.19 U	0.19 U
other SVOC	Chloromethane	µg/L					0.39 U	1.6 U																	0.19 U	0.19 U	0.19 U
other SVOC	Di-N-Butylphthalate	µg/L																									
other SVOC	Di-n-octyl phthalate	µg/L																									
other SVOC	Isophorone	µg/L																									
other SVOC	Nitrobenzene	µg/L																									
other SVOC	N-Nitrosodi-N-propylamine	µg/L																									
other SVOC	N-Nitrosodiphenylamine	µg/L																									
other SVOC	Perylene	µg/L																									
PAH	1-Methylnaphthalene	µg/L	1500	1800																							
PAH	2-Methylnaphthalene	µg/L	1500	1800																							
PAH	Acenaphthene	µg/L	600	600	0.02 U		**0.3**	0.09 U	0.09 U	**0.85**	**75**	**48**	**0.42**														
PAH	Acenaphthylene	µg/L	1.4	1.8	0.01 U		0.11 U	0.11 U	0.11 U	0.11 U	**0.72**	**0.72**	0.11 U														
PAH	Anthracene	µg/L	1	2.4	0.01 U		0.07 U	0.07 U	0.07 U	0.07 U	**4.1**	**3.89**	**0.42**														
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	0.01 U		0.07 U	0.07 U	0.07 U	0.07 U	**0.07**	**0.12**	0.07 U														
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	0.01 U		0.09 U	0.09 U	0.09 U	0.09 U	**0.09**	0.09 U	0.09 U														
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75																							
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	0.01 U		0.02 U	0.02 U	0.02 U	0.02 U	**0.09**	**0.05**	0.02 U														
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	0.01 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.6 U														
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	0.01 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U														
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																							
PAH	Chrysene	µg/L	0.7	1	0.01 U		0.04 U	0.04 U	0.04 U	0.04 U	**0.11**	**0.14**	**0.05**														
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	0.01 U		0.09 U	0.09 U	0.3 U	0.09 U	0.09 U	0.09 U	0.09 U														
PAH	Fluoranthene	µg/L	73	130	0.01 U		0.12 U	0.12 U	0.12 U	0.12 U	**1.4**	**1.3**	**0.56**														
PAH	Fluorene	µg/L	290	400	0.01 U		0.09 U	0.09 U	0.09 U	**0.56**	**21**	**13**	**0.56**														
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	0.01 U		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U														
PAH	Naphthalene	µg/L	1400	1400	0.02 U		**1.6**	1.2 U	**0.85**	**0.39**	**470**	**550**	**0.36**														
PAH	Phenanthrene	µg/L	380	580	0.01 U		**0.13**	0.11 U	0.11 U	**0.5**	**23**	**17.99**	**1.8**														
PAH	Pyrene	µg/L	5.7	68	0.01 U		0.12 U	0.12 U	0.12 U	0.12 U	**1.5**	**1.5**	**0.41**														
PCB	PCB, Total	µg/L	0.2	7.8	0.04 U									0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U								
PHC	F1 (C6-C10)	µg/L	420	750	4.99 U	4.99 U	100 U	**39000**	100 U	**2200**	**2000**	**2800**	239.99 U														
PHC	F1-BTEX	µg/L	420	750																							
PHC	F2 (C10-C16)	µg/L	150	150	9.99 U	9.99 U	100 U	**38000**	100 U	**419.99**	**2099.99**	**2400**	**239.99**														
PHC	F3 (C16-C34)	µg/L	500	500	50 U	**68**	100 U	**1900**	500 U	500 U	500 U	500 U	500 U														
PHC	F4 (C34-C50)	µg/L	500	500	50 U	50 U	100 U	500 U	500 U	500 U	500 U	500 U	500 U														
PHC	Chrom. to baseline at nC50	None																									
SVOC	Benzo(e)pyrene	µg/L																									
SVOC	Hexachlorocyclopentadiene	µg/L																									
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3			0.09 U	0.39 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,1,1-Trichloroethane	µg/L	640	640			0.3 U	1.2 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2			0.09 U	0.39 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7			0.19 U	0.79 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	1,1-Dichloroethane	µg/L	320	320			2.4 U	1.2 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,1-Dichloroethene	µg/L	1.6	1.6										3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,2-Dibromoethane	µg/L	0.25	0.25			0.19 U	0.79 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	1,2-Dichlorobenzene	µg/L	4600	4600			0.09 U	0.39 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	1,2-Dichloroethane	µg/L	1.6	1.6			**0.34**	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,2-Dichloroethene (Total)	µg/L												3 U		0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,2-Dichloropropane	µg/L	16	16			0.19 U	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	1,3-Dichlorobenzene	µg/L	7600	9600			0.09 U	0.39 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	1,3-Dichloropropene	µg/L	5.2	5.2																							
VOC	1,4-Dichlorobenzene	µg/L	8	8			0.09 U	0.39 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	2-Butanone	µg/L	470000	470000			0.89 U	3.59 U						100 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U								
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000			0.3 U	1.2 U						100 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U								
VOC	Acetone	µg/L	100000	130000			0.5 U	2 U						300 U	9.99 U	9.99 U	9.99 U	9.99 U	9.99 U								
VOC	Benzene	µg/L	44	44	**0.002**	**0.001**	**0.73**	**8.8**	0.19 U	**79.99**	**190**	**440**	**0.36**	3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Bromodichloromethane	µg/L	67000	85000			0.19 U	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Bromoform	µg/L	380	380			0.09 U	0.39 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	Bromomethane	µg/L	5.6	5.6			0.19 U	0.79 U						9.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U								
VOC	Carbon tetrachloride	µg/L	0.79	0.79			0.19 U	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Chlorobenzene	µg/L	500	630			0.09 U	0.39 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Chlorodibromomethane	µg/L	65000	82000			0.09 U	0.39 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	Chloroform	µg/L	2.4	2.4			0.19 U	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6			0.19 U	0.79 U																			
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2			0.19 U	0.79 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**CH2MHILL MW12**	**CH2MHILL MW12**	**CH2MHILL MW13**	**CH2MHILL MW19**	**CH2MHILL MW4**	**CH2MHILL MW5**	**CH2MHILL MW6**	**CH2MHILL MW7**	**CH2MHILL MW9**	**DCS BH06-1**	**DCS BH06-2**	**DCS BH06-3**	**DCS BH06-7**	**DCS BH06-8**	**DCS BH06-9**	**DCS BH-102**	**DCS BH-103**	**DCS BH-105D**	**DCS BH-105D**	**DCS BH-107**	**DCS BH-111**	**DCS BH-111D**	**DCS BH-113**
					Sample ID	MW12I	MW12I	MW13	MW19	MW4	MW5	MW6	MW7	MW9	BH06-1	BH06-2	BH06-3	BH06-7	BH06-8	BH06-9	BH-102	BH-103	BH-105	BH-105 D	BH-107	BH-111	BH-111D	BH-113
					Start Depth (mbgs)	0.61	0.61	1.2	0.35	0.66	0.66	1.57	0.66	0.66	1.3	1.2	1.8	1.66	1.52	1.52	1	1	1	1	1	1	6.25	1
					End Depth (mbgs)	3.66	3.66	4.2	1.9	3.66	3.66	4.57	3.66	3.66	4.3	4.2	4.8	6.1	4.57	3.81	2.6	2.5	2.5	2.5	2.5	1.5	7.75	2.5
					Date	15 Aug 2006	16 Aug 2006	25 Oct 2006	11 Feb 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	28 Aug 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	01 Nov 2006	27 Sep 1996	27 Sep 1996	26 Sep 1996	26 Sep 1996	26 Sep 1996	20 Nov 1996	20 Nov 1996	25 Sep 1996
VOC	Dichlorodifluoromethane	µg/L	3500	4400																								
VOC	Dichloromethane	µg/L	610	610			0.3 U	1.2 U							9.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U								
VOC	Ethylbenzene	µg/L	1800	2300	**0.002**	0.002 U	**0.53**	**4.1**	0.09 U	**7.49**	**120**	**479.99**	**0.76**	3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190			0.19 U	0.79 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	n-Hexane	µg/L	51	51																								
VOC	Styrene	µg/L	1300	1300			0.09 U	0.39 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Tetrachloroethene	µg/L	1.6	1.6			0.09 U	0.39 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Toluene	µg/L	14000	18000	**0.005**	**0.002**	**0.42**	**1.3**	0.19 U	**7.19**	**2**	**7.3**	**0.25**	4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	**1.9**								
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6			0.19 U	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2			0.3 U	1.2 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	Trichloroethylene	µg/L	1.6	1.6			**0.34**	0.79 U						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Trichlorofluoromethane	µg/L	2000	2500			0.39 U	1.6 U																				
VOC	Vinyl Chloride	µg/L	0.5	0.5			0.17 U	0.68 U						4.99 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U								
VOC	Xylene, o	µg/L	3300	4200	**0.002**	0.002 U	**0.17**	**0.39**						3 U	0.09 U	0.09 U	0.09 U	**0.19**	0.09 U								
VOC	Xylenes, m & p	µg/L	3300	4200	**0.008**	0.002 U	**0.36**	**2.2**						3 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U								
VOC	Xylenes, Total	µg/L	3300	4200	**0.01**	0.002 U	**0.53**	**2.2**	**0.21**	**9.7**	**35.99**	**180**	**1.4**	3 U	0.09 U	0.09 U	0.09 U	**0.19**	0.09 U								

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**DCS BH-122**	**DCS BH-124**	**DCS BH-131**	**DCS BH-132D**	**DCS BH-132S**	**DCS BH-141**	**DCS BH-145**	**DCS BH-147**	**DCS BH-148**	**DCS BH-4**	**GAL - BH 14-1 (130)**	**GAL - BH 14-2 (130)**	**GAL - BH 14-4 (130)**	**GAL - BH 14-5 (130)**	**GAL - BH 14-6 (130)**	**GOLDER BH10**	**GOLDER BH12**	**GOLDER BH13**	**GOLDER BH14**	**GOLDER BH15**	**GOLDER BH-15 - 92**	**GOLDER BH-16 - 92**
					Sample ID	BH-122	BH-124	BH-131	BH-132D	BH-132S	BH-141	BH-145	BH-147	BH-148	BH-4	MW 14-1	MW 14-2	MW 14-4	MW 14-5	MW 14-6	BH10	BH12	BH13	BH14	BH15	BH-15 - 92	BH-16 - 92
					Start Depth (mbgs)	2.1	2.5	1.9	4.3	1.7	2.8	2.8	2.2	2.3	0.8	4.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	0.6	0.8
					End Depth (mbgs)	3.6	4	3.4	5.8	3.2	3.3	4.3	3.7	3.8	2.3	7.6	4.3	4.3	4.3	4.3	3.66	3.66	3.66	4.5	4.5	3.6	3.8
					Date	19 Nov 1996	19 Nov 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	20 Nov 1996	20 Nov 1996	19 Nov 1996	03 Feb 2003	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	18 May 2006	18 May 2006	18 May 2006	18 May 2006	18 May 2006	11 Jun 1992	11 Jun 1992
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																							
ABN	1,2,4-Trichlorobenzene	µg/L	180	180																	1 U	1 U			1 U	0.5 U	0.5 U
ABN	2,4-Dimethylphenol	µg/L	31000	39000																	**67**	4.99 U			20 U		
ABN	2,4-Dinitrophenol	µg/L	9000	11000																	20 U	20 U			1 U		
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																	3 U	3 U			3 U	0.5 U	0.5 U
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																						0.5 U	0.5 U
ABN	2-Chlorophenol	µg/L	2600	3300																	1 U	1 U			1 U		
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																	4.99 U	4.99 U			4.99 U	25 U	25 U
ABN	4-Chloroaniline	µg/L	320	400																	9.99 U	9.99 U			9.99 U		
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																	4.99 U	4.99 U			4.99 U	2 U	2 U
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																	4.99 U	4.99 U			4.99 U	2 U	2 U
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																	9.99 U	9.99 U			9.99 U	2 U	2 U
ABN	Diethylphthalate	µg/L	30	38																	1 U	9.99 U			1 U	1 U	1 U
ABN	Dimethylphthalate	µg/L	30	38																	1 U	1 U			1 U	2 U	2 U
ABN	Phenol	µg/L	9600	12000																	4.99 U	4.99 U			4.99 U		
BIOLOGICAL	Fecal coliform	µg/L					**0**			**0**		**0**															
CHEMISTRY	Biochemical Oxygen Demand	µg/L					**158.99**			**24**		**27**															
CHEMISTRY	Lab pH	pH UNITS					**7.19**			**6.42**		**7.26**		7 U													
CHEMISTRY	Moisture, percent	%																									
CHEMISTRY	Nitrate (as N)	µg/L																									
Chemistry	Nitrate as N	µg/L																									
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L																									
CHEMISTRY	Nitrite (as N)	µg/L																									
CHEMISTRY	Total Suspended Solids	µg/L					**278**			**7**		**23**															
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																	4.99 U	4.99 U			4.99 U		
CP	2,4,6-Trichlorophenol	µg/L	180	230																	4.99 U	4.99 U			4.99 U		
CP	2,4-Dichlorophenol	µg/L	3700	4600																	1 U	1 U			4.99 U		
CP	Pentachlorophenol	µg/L	50	62																	1 U	1 U			4.99 U		
INORGANIC	Antimony	µg/L	16000	20000										1 U	0.5 U	2.5 U	0.5 U	2.5 U	0.5 U	1 U	**12**	1 U	1 U	**1**		
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000																							
INORGANIC	Arsenic	µg/L	1500	1900										1 U	1 U	5 U	1 U	5 U	16 U	**3**	**32**	**2**	**1**	**3**		
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900																							
INORGANIC	Barium	µg/L	23000	29000										**80**	340 U	400 U	360 U	20 U	140 U	**190**	**470**	**1300**	**1600**	**330**		
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000																							
INORGANIC	Beryllium	µg/L	53	67										1 U	0.5 U	2.5 U	0.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67																							
INORGANIC	Boron	µg/L	36000	45000										**180**	38 U	1900 U	1400 U	390 U	3000 U	**360**	**400**	**779.99**	**600**	**560**		
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000																							
INORGANIC	Cadmium	µg/L	2.1	2.7			0.001 U			0.001 U		0.001 U		1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U		
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7																							
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000													130 U		100 U								
INORGANIC	Chromium	µg/L	640	810			0.01 U			0.01 U		0.01 U		8 U	5 U	25 U	5 U	**25**	5 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U		
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810																							
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140																							
INORGANIC	Cobalt	µg/L	52	66										2 U	**1**	2.5 U	**1**	2.5 U	**0.61**	**8**	**20**	**7.19**	**7.7**	**13**		
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66																							
INORGANIC	Copper	µg/L	69	87			0.01 U			0.01 U		0.01 U		9 U	**1.6**	5 U	1 U	24 U	1 U	**2**	**2**	**1**	**2**	**0.09**		
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87																							
INORGANIC	Cyanide	µg/L	52	66											**3**	**2**	2 U	2 U	2 U								
INORGANIC	Electrical Conductivity	ms/cm																									
INORGANIC	Lead	µg/L	20	25			0.01 U			0.01 U		0.01 U		3 U	0.5 U	2.5 U	0.5 U	**3**	0.5 U	**2.79**	**1.9**	**1.4**	**1**	0.5 U		
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25																							
INORGANIC	Mercury	µg/L	0.29	0.29			0.0001 U			0.0001 U		0.0001 U		0.1 U	0.1 U	**0.2**	0.1 U	0.1 U	0.1 U	0.09 U	0.09 U	**0.19**	0.09 U	0.09 U		
INORGANIC	Molybdenum	µg/L	7300	9200										**2**	**3.8**	**2.9**	**1.5**	65 U	**2.3**	**2**	**56**	1 U	1 U	1 U		
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200																							
INORGANIC	Nickel	µg/L	390	490			0.04 U			0.04 U		0.04 U		**10**	**2.09**	**6.19**	**4.4**	25 U	**5.3**	4.99 U	**20**	**1**	1 U	4.99 U		
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490																							
INORGANIC	Selenium	µg/L	50	63										3 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U		
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63																							
INORGANIC	Silver	µg/L	1.2	1.5										0.3 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U		
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5																							
INORGANIC	Sodium	µg/L	1800000	2300000										**100000**	81000 U	890000 U	130000 U	540000 U	74000 U							
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000																							
INORGANIC	Sodium Absorption Ratio	None																									
INORGANIC	Thallium	µg/L	400	510										1 U	0.05 U	0.25 U	0.05 U	0.25 U	0.05 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U		
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510																							
INORGANIC	Uranium (U)	µg/L	330	420											0.1 U	0.5 U	0.1 U	0.5 U	**0.41**								
INORGANIC	Vanadium	µg/L	200	250										1 U	**0.73**	2.5 U	**0.8**	13 U	**1.1**	**2**	**2**	**1**	1 U	1 U		
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250																							
INORGANIC	Zinc	µg/L	890	1100			0.01 U			0.01 U		0.01 U		**30**	17 U	25 U	35 U	25 U	**6.3**	**9.99**	**43**	**9.99**	**11**	**8.99**		
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100																							

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	DCS BH-122	DCS BH-124	DCS BH-131	DCS BH-132D	DCS BH-132S	DCS BH-141	DCS BH-145	DCS BH-147	DCS BH-148	DCS BH-4	GAL - BH 14-1 (130)	GAL - BH 14-2 (130)	GAL - BH 14-4 (130)	GAL - BH 14-5 (130)	GAL - BH 14-6 (130)	GOLDER BH10	GOLDER BH12	GOLDER BH13	GOLDER BH14	GOLDER BH15	GOLDER BH-15 - 92	GOLDER BH-16 - 92
					Sample ID	BH-122	BH-124	BH-131	BH-132D	BH-132S	BH-141	BH-145	BH-147	BH-148	BH-4	MW 14-1	MW 14-2	MW 14-4	MW 14-5	MW 14-6	BH10	BH12	BH13	BH14	BH15	BH-15 - 92	BH-16 - 92
					Start Depth (mbgs)	2.1	2.5	1.9	4.3	1.7	2.8	2.8	2.2	2.3	0.8	4.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	0.6	0.8
					End Depth (mbgs)	3.6	4	3.4	5.8	3.2	3.3	4.3	3.7	3.8	2.3	7.6	4.3	4.3	4.3	4.3	3.66	3.66	3.66	4.5	4.5	3.6	3.8
					Date	19 Nov 1996	19 Nov 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	20 Nov 1996	20 Nov 1996	19 Nov 1996	03 Feb 2003	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	18 May 2006	18 May 2006	18 May 2006	18 May 2006	18 May 2006	11 Jun 1992	11 Jun 1992
OCP	Hexachlorobenzene	µg/L	3.1	3.1																					1 U	1 U
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																					1 U	1 U
OCP	Hexachloroethane	µg/L	94	94																	2 U	2 U			1 U	1 U
other SVOC	2-Chloronaphthalene	µg/L																							1 U	1 U
other SVOC	2-Hexanone	µg/L																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																							0.3 U	0.3 U
other SVOC	4-Chlorophenyl Phenylether	µg/L																							0.5 U	0.5 U
other SVOC	Bis (2-chloroethoxy) methane	µg/L																							2 U	2 U
other SVOC	Butyl benzyl phthalate	µg/L																							0.5 U	0.5 U
other SVOC	Chloroethane	µg/L			0.19 U	0.19 U				0.19 U	0.19 U	0.19 U	0.19 U	0.19 U											4.99 U	4.99 U
other SVOC	Chloromethane	µg/L			0.19 U	0.19 U				**2**	0.19 U	0.19 U	0.19 U	0.19 U											2 U	2 U
other SVOC	Di-N-Butylphthalate	µg/L																							2 U	2 U
other SVOC	Di-n-octyl phthalate	µg/L																							2 U	2 U
other SVOC	Isophorone	µg/L																							0.5 U	0.5 U
other SVOC	Nitrobenzene	µg/L																							0.5 U	0.5 U
other SVOC	N-Nitrosodi-N-propylamine	µg/L																							2 U	2 U
other SVOC	N-Nitrosodiphenylamine	µg/L																							2 U	2 U
other SVOC	Perylene	µg/L														0.05 U	0.05 U	0.05 U	0.05 U	0.05 U						
PAH	1-Methylnaphthalene	µg/L	1500	1800												64 U	**0.07**	**1.1**	**0.07**	0.05 U	**140**	**21**	**0.6**	**9.3**	2 U	**1.8**	**20.09**
PAH	2-Methylnaphthalene	µg/L	1500	1800												130 U	0.07 U	1.1 U	**0.13**	0.07 U	**220**	**4**	**0.5**	0.04 U	2 U	**1.2**	**9.99**
PAH	Acenaphthene	µg/L	600	600						**209.99**					300 U	28 U	**0.31**	**3.09**	**0.19**	0.05 U	**17**	**7**	**3**	**2.9**	**4.99**	**2.7**	**9.2**
PAH	Acenaphthylene	µg/L	1.4	1.8						**220**					300 U	**0.34**	0.05 U	0.05 U	0.05 U	0.05 U	2 U	2 U	0.5 U	0.04 U	2 U	0.5 U	0.5 U
PAH	Anthracene	µg/L	1	2.4						**30.99**					10 U	**1.1**	**0.05**	**0.34**	0.05 U	0.05 U	**7.3**	0.5 U	**1.3**	**0.63**	**1.4**	0.39 U	**1**
PAH	Benzo(a)anthracene	µg/L	1.8	4.7						**0.79**					90 U	0.05 U	**0.06**	**0.07**	0.05 U	0.05 U	**11**	**2.49**	**4.8**	**0.47**	**2.7**	0.5 U	0.5 U
PAH	Benzo(a)pyrene	µg/L	0.81	0.81						**0.12**					**30**	**0.01**	**0.05**	**0.02**	**0.02**	0.01 U	**9.1**	**1.7**	**3.1**	**0.25**	**1.6**	0.5 U	0.5 U
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75												0.05 U	**0.06**	0.05 U	0.05 U	0.05 U							
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75						**0.31**					90 U						**8.89**	**2.09**	**4.1**	**0.42**	**1.9**	0.5 U	0.5 U
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2						0.09 U					190 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**5.4**	**1.3**	**2**	**0.19**	**0.89**	0.5 U	0.5 U
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4						**0.14**					10 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**3.1**	**0.79**	**1.7**	**0.15**	**0.79**	0.5 U	0.5 U
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75											40 U												
PAH	Chrysene	µg/L	0.7	1						**0.7**					40 U	0.05 U	**0.06**	**0.06**	0.05 U	0.05 U	**6.89**	**1.6**	**3.3**	**0.36**	**1.4**	0.3 U	0.3 U
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52						**0.15**					90 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**2**	1 U	1 U	0.09 U	1 U	1 U	1 U
PAH	Fluoranthene	µg/L	73	130						**4.49**					50 U	**0.31**	**0.22**	**0.33**	**0.06**	0.05 U	**17**	**4.99**	**6.3**	**1.4**	**4.99**	**0.5**	**0.79**
PAH	Fluorene	µg/L	290	400						**78**					390 U	**5.8**	**0.1**	**0.74**	0.05 U	0.05 U	**21**	**9.99**	**2.79**	**3.59**	**4.99**	**1**	**3.8**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2						**0.42**					190 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**4**	1 U	**2**	**0.3**	1 U	1 U	1 U
PAH	Naphthalene	µg/L	1400	1400						**8699.99**					190 U	1900 U	**0.44**	**0.14**	**0.2**	0.05 U	**75**	2 U	**1.4**	**1.7**	2 U	**45.6**	**41.4**
PAH	Phenanthrene	µg/L	380	580						**88**					90 U	**4.9**	**0.22**	**1.1**	**0.08**	0.02 U	**64**	**9.99**	**5.9**	**2.2**	**3**	**2**	**4.9**
PAH	Pyrene	µg/L	5.7	68						**5.79**					110 U	**0.37**	**0.6**	**0.44**	**0.1**	0.05 U	**21**	**4.1**	**5.29**	**1.1**	**4.6**	**0.5**	**1**
PCB	PCB, Total	µg/L	0.2	7.8												0.5 U	0.05 U			**0.07**		0.04 U			0.04 U		
PHC	F1 (C6-C10)	µg/L	420	750												5800 U	25 U	25 U	25 U	25 U	**1900**	**380**	100 U	100 U	100 U		
PHC	F1-BTEX	µg/L	420	750																							
PHC	F2 (C10-C16)	µg/L	150	150												4100 U	130 U	140 U	100 U	100 U	**3599.99**	**22000**	**670**	**2300**	**9600**		
PHC	F3 (C16-C34)	µg/L	500	500												200 U	200 U	200 U	200 U	200 U	**1700**	**12000**	**389.99**	**810**	**4599.99**		
PHC	F4 (C34-C50)	µg/L	500	500												200 U	200 U	200 U	200 U	200 U	100 U	**3700**	100 U	100 U	100 U		
PHC	Chrom. to baseline at nC50	None																									
SVOC	Benzo(e)pyrene	µg/L														0.05 U	0.05 U	0.05 U	0.05 U	0.05 U							
SVOC	Hexachlorocyclopentadiene	µg/L																								4.99 U	4.99 U
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	4.99 U	4.99 U	1 U	1 U		
VOC	1,1,1-Trichloroethane	µg/L	640	640												10 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	2 U	2 U		
VOC	1,1-Dichloroethane	µg/L	320	320												10 U	0.2 U	0.2 U	0.2 U	**0.28**	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	1,1-Dichloroethene	µg/L	1.6	1.6												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.09 U	0.5 U	0.5 U	0.09 U	0.09 U		
VOC	1,2-Dibromoethane	µg/L	0.25	0.25												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	2 U	2 U		
VOC	1,2-Dichlorobenzene	µg/L	4600	4600												25 U	0.5 U	0.5 U	0.5 U	0.5 U	4.99 U	4.99 U	1 U	2 U	4.99 U		
VOC	1,2-Dichloroethane	µg/L	1.6	1.6												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	1,2-Dichloroethene (Total)	µg/L																									
VOC	1,2-Dichloropropane	µg/L	16	16												10 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	1,3-Dichlorobenzene	µg/L	7600	9600												25 U	0.5 U	0.5 U	0.5 U	0.5 U	4.99 U	4.99 U	1 U	2 U	4.99 U		
VOC	1,3-Dichloropropene	µg/L	5.2	5.2																							
VOC	1,4-Dichlorobenzene	µg/L	8	8												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.99 U	4.99 U	1 U	2 U	4.99 U		
VOC	2-Butanone	µg/L	470000	470000												500 U	10 U	10 U	10 U	10 U	50 U	29.99 U	29.99 U	50 U	50 U		
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000												250 U	5 U	5 U	5 U	5 U	50 U	29.99 U	29.99 U	50 U	50 U		
VOC	Acetone	µg/L	100000	130000												500 U	10 U	10 U	31 U	10 U	100 U	50 U	50 U	100 U	100 U		
VOC	Benzene	µg/L	44	44												4700 U	**0.4**	0.2 U	0.2 U	0.2 U	**110**	**1.8**	0.5 U	1 U	1 U		
VOC	Bromodichloromethane	µg/L	67000	85000												25 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	Bromoform	µg/L	380	380												50 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	2 U	2 U		
VOC	Bromomethane	µg/L	5.6	5.6												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.99 U	3 U	3 U	4.99 U	4.99 U		
VOC	Carbon tetrachloride	µg/L	0.79	0.79												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	Chlorobenzene	µg/L	500	630												10 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	Chlorodibromomethane	µg/L	65000	82000												25 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	2 U	2 U		
VOC	Chloroform	µg/L	2.4	2.4												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2												0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	2 U	2 U		

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**DCS BH-122**	**DCS BH-124**	**DCS BH-131**	**DCS BH-132D**	**DCS BH-132S**	**DCS BH-141**	**DCS BH-145**	**DCS BH-147**	**DCS BH-148**	**DCS BH-4**	**GAL - BH 14-1 (130)**	**GAL - BH 14-2 (130)**	**GAL - BH 14-4 (130)**	**GAL - BH 14-5 (130)**	**GAL - BH 14-6 (130)**	**GOLDER BH10**	**GOLDER BH12**	**GOLDER BH13**	**GOLDER BH14**	**GOLDER BH15**	**GOLDER BH-15 - 92**	**GOLDER BH-16 - 92**
					Sample ID	BH-122	BH-124	BH-131	BH-132D	BH-132S	BH-141	BH-145	BH-147	BH-148	BH-4	MW 14-1	MW 14-2	MW 14-4	MW 14-5	MW 14-6	BH10	BH12	BH13	BH14	BH15	BH-15 - 92	BH-16 - 92
					Start Depth (mbgs)	2.1	2.5	1.9	4.3	1.7	2.8	2.8	2.2	2.3	0.8	4.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	0.6	0.8
					End Depth (mbgs)	3.6	4	3.4	5.8	3.2	3.3	4.3	3.7	3.8	2.3	7.6	4.3	4.3	4.3	4.3	3.66	3.66	3.66	4.5	4.5	3.6	3.8
					Date	19 Nov 1996	19 Nov 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	19 Dec 1996	20 Nov 1996	20 Nov 1996	19 Nov 1996	03 Feb 2003	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	04 Sep 2014	18 May 2006	18 May 2006	18 May 2006	18 May 2006	18 May 2006	11 Jun 1992	11 Jun 1992
VOC	Dichlorodifluoromethane	µg/L	3500	4400												50 U	1 U	1 U	1 U	1 U							
VOC	Dichloromethane	µg/L	610	610												100 U	2 U	2 U	2 U	2 U	4.99 U	3 U	3 U	4.99 U	4.99 U		
VOC	Ethylbenzene	µg/L	1800	2300												520 U	0.2 U	0.2 U	0.2 U	0.2 U	**27**	0.5 U	0.5 U	1 U	1 U		
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190												25 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	2 U	2 U		
VOC	n-Hexane	µg/L	51	51												50 U	1 U	1 U	1 U	1 U							
VOC	Styrene	µg/L	1300	1300												25 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	1 U	1 U		
VOC	Tetrachloroethene	µg/L	1.6	1.6												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	Toluene	µg/L	14000	18000												**12**	0.2 U	0.2 U	**0.3**	0.2 U	**110**	**1**	1 U	2 U	2 U		
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2												0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	1 U	1 U	2 U	2 U		
VOC	Trichloroethylene	µg/L	1.6	1.6												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	1 U	1 U		
VOC	Trichlorofluoromethane	µg/L	2000	2500												25 U	0.5 U	0.5 U	0.5 U	0.5 U							
VOC	Vinyl Chloride	µg/L	0.5	0.5												0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U		
VOC	Xylene, o	µg/L	3300	4200												130 U	0.2 U	0.2 U	0.2 U	0.2 U							
VOC	Xylenes, m & p	µg/L	3300	4200												64 U	0.2 U	0.2 U	0.2 U	0.2 U							
VOC	Xylenes, Total	µg/L	3300	4200												190 U	0.2 U	0.2 U	0.2 U	0.2 U	**140**	**1.7**	**1.6**	1.1 U	**1**		

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**GOLDER BH-18 - 92**	**GOLDER BH-20A - 92**	**GOLDER BH-3 - 91**	**GOLDER BH-7 - 91**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE MW1-08**	**MTE MW1-08**	**MTE MW1-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW3-08**	**MTE MW3-08**
					Sample ID	BH-18 - 92	BH-20A - 92	BH-3 - 91	BH-7-91	BH1-08D	BH1-08S	BH1-08S	BH1-08S	BH1-08S	BH1-08S	MW1-08	MW1-08D	MW1-08S	MW2-08	MW2-08D	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW3-08	MW3-08D
					Start Depth (mbgs)	0.8	0.66	0.6	0.66							1.57			1.57							1.57	
					End Depth (mbgs)	3.8	3.66	3.9	3.66							4.57			4.57							4.57	
					Date	11 Jun 1992	11 Jun 1992	28 May 1992	28 May 1992	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	20 Nov 2008	19 Nov 2008	19 Nov 2008	21 Nov 2008	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	22 Nov 2008	19 Nov 2008
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																							
ABN	1,2,4-Trichlorobenzene	µg/L	180	180	0.5 U	0.5 U	0.5 U	0.5 U							0.3 U			1.2 U		0.04 U					1.2 U	
ABN	2,4-Dimethylphenol	µg/L	31000	39000																						
ABN	2,4-Dinitrophenol	µg/L	9000	11000																						
ABN	2,4-Dinitrotoluene	µg/L	2300	2900	0.5 U	0.5 U	0.5 U	0.5 U																		
ABN	2,6-Dinitrotoluene	µg/L	2300	2900	0.5 U	0.5 U	0.5 U	0.5 U																		
ABN	2-Chlorophenol	µg/L	2600	3300																						
ABN	3,3`-Dichlorobenzidine	µg/L	500	640	25 U	25 U	25 U	25 U																		
ABN	4-Chloroaniline	µg/L	320	400																						
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000	2 U	2 U	2 U	2 U																		
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000	2 U	2 U	2 U	2 U																		
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140	2 U	2 U	2 U	2 U																		
ABN	Diethylphthalate	µg/L	30	38	1 U	1 U	1 U	1 U																		
ABN	Dimethylphthalate	µg/L	30	38	2 U	2 U	2 U	2 U																		
ABN	Phenol	µg/L	9600	12000																						
BIOLOGICAL	Fecal coliform	µg/L																								
CHEMISTRY	Biochemical Oxygen Demand	µg/L																								
CHEMISTRY	Lab pH	pH UNITS														**8.56**		**7.25**							**7.48**	
CHEMISTRY	Moisture, percent	%																								
CHEMISTRY	Nitrate (as N)	µg/L																0.04 U							0.04 U	
Chemistry	Nitrate as N	µg/L																								
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L																								
CHEMISTRY	Nitrite (as N)	µg/L																0.04 U							0.04 U	
CHEMISTRY	Total Suspended Solids	µg/L																								
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																						
CP	2,4,6-Trichlorophenol	µg/L	180	230																						
CP	2,4-Dichlorophenol	µg/L	3700	4600																						
CP	Pentachlorophenol	µg/L	50	62																						
INORGANIC	Antimony	µg/L	16000	20000												1.6 U		1 U							1 U	
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000																						
INORGANIC	Arsenic	µg/L	1500	1900												**0.79**		**4**							**2.24**	
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900																						
INORGANIC	Barium	µg/L	23000	29000												**12.9**		**4.99**							**529.99**	
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000																						
INORGANIC	Beryllium	µg/L	53	67												0.39 U		1 U							1 U	
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67																						
INORGANIC	Boron	µg/L	36000	45000												**0.17**		**375.99**							**472.99**	
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000																						
INORGANIC	Cadmium	µg/L	2.1	2.7												0.39 U		0.5 U							0.5 U	
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7																						
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000																						
INORGANIC	Chromium	µg/L	640	810												4.4 U		**4.99**							10.6 U	
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810																						
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140																						
INORGANIC	Cobalt	µg/L	52	66												**2.3**		**2.49**							**0.69**	
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66																						
INORGANIC	Copper	µg/L	69	87												**4.49**		**0.98**							0.79 U	
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87																						
INORGANIC	Cyanide	µg/L	52	66												1 U		9.99 U							9.99 U	
INORGANIC	Electrical Conductivity	ms/cm														**0.13**		**1.36**							**1**	
INORGANIC	Lead	µg/L	20	25												**3.1**		0.5 U							0.5 U	
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25																						
INORGANIC	Mercury	µg/L	0.29	0.29												0.01 U		0.09 U							0.09 U	
INORGANIC	Molybdenum	µg/L	7300	9200												0.5 U		**7**							0.5 U	
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200																						
INORGANIC	Nickel	µg/L	390	490												5.59 U		**9.66**							**12.7**	
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490																						
INORGANIC	Selenium	µg/L	50	63												0.79 U		**1.71**							**2.93**	
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63																						
INORGANIC	Silver	µg/L	1.2	1.5												0.39 U		0.5 U							0.5 U	
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5																						
INORGANIC	Sodium	µg/L	1800000	2300000																						
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000																						
INORGANIC	Sodium Absorption Ratio	None														**0.47**	**3.01**			**0.52**						
INORGANIC	Thallium	µg/L	400	510												0.39 U		0.5 U							0.5 U	
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510																						
INORGANIC	Uranium (U)	µg/L	330	420																						
INORGANIC	Vanadium	µg/L	200	250												**7**		**0.69**							**1.81**	
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250																						
INORGANIC	Zinc	µg/L	890	1100												**22**		**19.2**							4.99 U	
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100																						

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	GOLDER BH-18 - 92	GOLDER BH-20A - 92	GOLDER BH-3 - 91	GOLDER BH-7 - 91	MTE BH1-08	MTE BH1-08	MTE BH1-08	MTE BH1-08	MTE BH1-08	MTE BH1-08	MTE MW1-08	MTE MW1-08	MTE MW1-08	MTE MW2-08	MTE MW2-08	MTE MW2-08	MTE MW2-08	MTE MW2-08	MTE MW2-08	MTE MW2-08	MTE MW3-08	MTE MW3-08
					Sample ID	BH-18 - 92	BH-20A - 92	BH-3 - 91	BH-7-91	BH1-08D	BH1-08S	BH1-08S	BH1-08S	BH1-08S	BH1-08S	MW1-08	MW1-08D	MW1-08S	MW2-08	MW2-08D	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW3-08	MW3-08D
					Start Depth (mbgs)	0.8	0.66	0.6	0.66							1.57			1.57							1.57	
					End Depth (mbgs)	3.8	3.66	3.9	3.66							4.57			4.57							4.57	
					Date	11 Jun 1992	11 Jun 1992	28 May 1992	28 May 1992	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	20 Nov 2008	19 Nov 2008	19 Nov 2008	21 Nov 2008	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	22 Nov 2008	19 Nov 2008
OCP	Hexachlorobenzene	µg/L	3.1	3.1		1 U	1 U	1 U	1 U																		
OCP	Hexachlorobutadiene	µg/L	0.44	0.44		1 U	1 U	1 U	1 U																		
OCP	Hexachloroethane	µg/L	94	94		1 U	1 U	1 U	1 U																		
other SVOC	2-Chloronaphthalene	µg/L				1 U	1 U		1 U																		
other SVOC	2-Hexanone	µg/L														0.3 U			1.2 U		0.26 U					1.2 U	
other SVOC	4-Bromophenyl Phenyl Ether	µg/L				0.3 U	0.3 U		0.3 U																		
other SVOC	4-Chlorophenyl Phenylether	µg/L				0.5 U	0.5 U		0.5 U																		
other SVOC	Bis (2-chloroethoxy) methane	µg/L				2 U	2 U		2 U																		
other SVOC	Butyl benzyl phthalate	µg/L				0.5 U	0.5 U		0.5 U																		
other SVOC	Chloroethane	µg/L					4.99 U		4.99 U							**5.79**			0.79 U		0.07 U					0.79 U	
other SVOC	Chloromethane	µg/L					2 U									0.39 U			1.6 U		0.11 U					1.6 U	
other SVOC	Di-N-Butylphthalate	µg/L				2 U	2 U		2 U																		
other SVOC	Di-n-octyl phthalate	µg/L				2 U	2 U		2 U																		
other SVOC	Isophorone	µg/L				0.5 U	0.5 U		0.5 U																		
other SVOC	Nitrobenzene	µg/L				0.5 U	0.5 U		0.5 U																		
other SVOC	N-Nitrosodi-N-propylamine	µg/L				2 U	2 U		2 U																		
other SVOC	N-Nitrosodiphenylamine	µg/L				2 U	2 U		2 U																		
other SVOC	Perylene	µg/L																									
PAH	1-Methylnaphthalene	µg/L	1500	1800		0.39 U	**15.1**	**2.3**	**3.4**																		
PAH	2-Methylnaphthalene	µg/L	1500	1800		0.5 U	0.39 U	**1.5**	**7.49**																		
PAH	Acenaphthene	µg/L	600	600		**1.6**	**15.69**	**3.8**	**2**				**2.09**						**3.4**				**4.4**			**110**	
PAH	Acenaphthylene	µg/L	1.4	1.8		0.5 U	0.5 U	0.5 U	0.5 U			**0.34**							**0.5**			**0.92**				0.11 U	
PAH	Anthracene	µg/L	1	2.4		0.19 U	**8.1**	**0.69**	0.5 U						**4.19**				**0.39**						**4**	**9.2**	
PAH	Benzo(a)anthracene	µg/L	1.8	4.7		0.5 U	**1.5**	0.5 U	0.5 U						**6.5**				0.07 U						**3.3**	**2.49**	
PAH	Benzo(a)pyrene	µg/L	0.81	0.81		0.5 U	**1.3**	0.5 U	0.5 U						**4.69**				0.09 U						**1.8**	**2.09**	
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75																							
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75		0.5 U	**0.69**	0.5 U	0.5 U						**5.2**				**0.05**						**2.09**	**1.8**	
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2		0.5 U	0.5 U	0.5 U	0.5 U						**1.9**				0.05 U						**1**	**0.79**	
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4		0.5 U	**1**	0.5 U	0.5 U						**1.2**				0.05 U						**0.63**	**0.53**	
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																							
PAH	Chrysene	µg/L	0.7	1		0.3 U	**1.8**	0.3 U	0.3 U						**5.5**				**0.05**						**2.79**	**2**	
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52		1 U	1 U	1 U	1 U						**0.53**				0.09 U						**26**	**0.14**	
PAH	Fluoranthene	µg/L	73	130		**0.5**	**7**	**0.89**	**1.4**						**13**				**0.47**						**9.49**	**8.29**	
PAH	Fluorene	µg/L	290	400		0.09 U	**17.3**	**1.8**	0.5 U					**2.2**					**2.4**					**5.59**		**27**	
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2		1 U	0.39 U	1 U	1 U						**1.8**				0.02 U						**1**	**0.73**	
PAH	Naphthalene	µg/L	1400	1400		**2**	0.19 U	**33.3**	**141**		**0.36**								**27**		**14**					**569.99**	**52**
PAH	Phenanthrene	µg/L	380	580		0.09 U	**33.59**	**3.8**	**2.2**						**15**				**2.9**						**17.99**	**55**	
PAH	Pyrene	µg/L	5.7	68		**0.69**	**10.3**	**0.89**	**1.7**						**12**				**0.39**						**9.6**	**9.49**	
PCB	PCB, Total	µg/L	0.2	7.8																							
PHC	F1 (C6-C10)	µg/L	420	750						4.99 U	4.99 U					**239.99**	4.99 U	**4.99**	**2400**	4.99 U	**1500**					**930**	**71.99**
PHC	F1-BTEX	µg/L	420	750																							
PHC	F2 (C10-C16)	µg/L	150	150						9.99 U	**2200**					180 U	9.99 U	**9.99**	500 U	9.99 U	**2099.99**					910 U	**120**
PHC	F3 (C16-C34)	µg/L	500	500						50 U	**1400**					100 U	50 U	**50**	100 U	50 U	**3800**					100 U	**220**
PHC	F4 (C34-C50)	µg/L	500	500						50 U	50 U					100 U	50 U	**50**	100 U	50 U	**209.99**					100 U	50 U
PHC	Chrom. to baseline at nC50	None																									
SVOC	Benzo(e)pyrene	µg/L																									
SVOC	Hexachlorocyclopentadiene	µg/L				4.99 U	4.99 U		4.99 U																		
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3												0.09 U			0.39 U		0.03 U					0.39 U	
VOC	1,1,1-Trichloroethane	µg/L	640	640												0.3 U			1.2 U		0.04 U					1.2 U	
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2												0.09 U			0.39 U		0.09 U					0.39 U	
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7												0.19 U			0.79 U							0.79 U	
VOC	1,1-Dichloroethane	µg/L	320	320												0.3 U			1.2 U		0.01 U					1.2 U	
VOC	1,1-Dichloroethene	µg/L	1.6	1.6												0.3 U			1.2 U		0.04 U					1.2 U	
VOC	1,2-Dibromoethane	µg/L	0.25	0.25												0.19 U			0.79 U		0.03 U					0.79 U	
VOC	1,2-Dichlorobenzene	µg/L	4600	4600												0.09 U			0.39 U		0.04 U					0.39 U	
VOC	1,2-Dichloroethane	µg/L	1.6	1.6												0.19 U			0.79 U		0.02 U					0.79 U	
VOC	1,2-Dichloroethene (Total)	µg/L																									
VOC	1,2-Dichloropropane	µg/L	16	16												0.19 U			0.79 U		0.02 U					0.79 U	
VOC	1,3-Dichlorobenzene	µg/L	7600	9600												0.09 U			0.39 U		0.04 U					0.39 U	
VOC	1,3-Dichloropropene	µg/L	5.2	5.2												0.3 U			1.2 U		0.03 U					1.2 U	
VOC	1,4-Dichlorobenzene	µg/L	8	8												0.09 U			0.39 U		0.04 U					0.39 U	
VOC	2-Butanone	µg/L	470000	470000												0.89 U			3.59 U		0.26 U					3.59 U	
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000												0.3 U			1.2 U		0.29 U					1.2 U	
VOC	Acetone	µg/L	100000	130000												0.5 U			2 U		0.47 U					2 U	
VOC	Benzene	µg/L	44	44						0.09 U	0.09 U					**46**	0.09 U	**0.09**	**1600**	0.09 U	0.02 U					**8.29**	**0.98**
VOC	Bromodichloromethane	µg/L	67000	85000												0.19 U			0.79 U		0.03 U					0.79 U	
VOC	Bromoform	µg/L	380	380												0.09 U			0.39 U		0.02 U					0.39 U	
VOC	Bromomethane	µg/L	5.6	5.6												0.19 U			0.79 U		0.09 U					0.79 U	
VOC	Carbon tetrachloride	µg/L	0.79	0.79												0.19 U			0.79 U		0.04 U					0.79 U	
VOC	Chlorobenzene	µg/L	500	630												**3.19**			0.39 U		0.04 U					0.39 U	
VOC	Chlorodibromomethane	µg/L	65000	82000												0.09 U			0.39 U		0.02 U					0.39 U	
VOC	Chloroform	µg/L	2.4	2.4												0.19 U			0.79 U		0.03 U					0.79 U	
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6												0.19 U			0.79 U		0.01 U					0.79 U	
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2												6.5 U			0.79 U		0.04 U					0.79 U	

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**GOLDER BH-18 - 92**	**GOLDER BH-20A - 92**	**GOLDER BH-3 - 91**	**GOLDER BH-7 - 91**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE BH1-08**	**MTE MW1-08**	**MTE MW1-08**	**MTE MW1-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW2-08**	**MTE MW3-08**	**MTE MW3-08**
					Sample ID	BH-18 - 92	BH-20A - 92	BH-3 - 91	BH-7-91	BH1-08D	BH1-08S	BH1-08S	BH1-08S	BH1-08S	BH1-08S	MW1-08	MW1-08D	MW1-08S	MW2-08	MW2-08D	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW2-08S	MW3-08	MW3-08D
					Start Depth (mbgs)	0.8	0.66	0.6	0.66							1.57			1.57							1.57	
					End Depth (mbgs)	3.8	3.66	3.9	3.66							4.57			4.57							4.57	
					Date	11 Jun 1992	11 Jun 1992	28 May 1992	28 May 1992	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	20 Nov 2008	19 Nov 2008	19 Nov 2008	21 Nov 2008	19 Nov 2008	19 Nov 2008	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	22 Nov 2008	19 Nov 2008
VOC	Dichlorodifluoromethane	µg/L	3500	4400																							
VOC	Dichloromethane	µg/L	610	610											0.3 U			1.2 U		0.04 U					1.2 U	
VOC	Ethylbenzene	µg/L	1800	2300						0.07 U	0.07 U					0.09 U	0.07 U	**0.07**	**200**	0.07 U	43 U					**0.39**	**0.36**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190												**4.9**			0.79 U		0.05 U					0.79 U	
VOC	n-Hexane	µg/L	51	51																							
VOC	Styrene	µg/L	1300	1300												0.09 U			0.39 U		0.04 U					0.39 U	
VOC	Tetrachloroethene	µg/L	1.6	1.6												0.19 U			0.79 U		0.07 U					0.79 U	
VOC	Toluene	µg/L	14000	18000						0.04 U	0.04 U					**6**	0.04 U	**0.04**	**12**	0.04 U	43 U					**1.2**	**32**
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6												0.19 U			0.79 U		0.04 U					0.79 U	
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2												0.3 U			1.2 U		0.03 U					1.2 U	
VOC	Trichloroethylene	µg/L	1.6	1.6												0.19 U			0.79 U		0.39 U					0.79 U	
VOC	Trichlorofluoromethane	µg/L	2000	2500												0.39 U			1.6 U		0.07 U					1.6 U	
VOC	Vinyl Chloride	µg/L	0.5	0.5												0.17 U			0.68 U		0.09 U					0.68 U	
VOC	Xylene, o	µg/L	3300	4200												**2.09**			**39.99**		**0.42**					**0.41**	
VOC	Xylenes, m & p	µg/L	3300	4200												**4.4**			**37**		**4.99**					**9.49**	
VOC	Xylenes, Total	µg/L	3300	4200						0.07 U	0.07 U					**6.5**	0.07 U	**0.07**	**77**	0.07 U	**5.4**					**9.89**	**20**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**MTE MW3-08**	**MTE MW3-08**	**MTE MW3-08**	**MTE MW3-08**	**MTE MW3-08**	**MTE MW3-08**	**MTE MW4-08**	**MTE MW4-08**	**MTE MW4-08**	**MTE MW5-08**	**MTE MW5-08**	**MTE MW5-08**	**MTE MW5-08**	**MTE MW6-08**	**MTE MW6-08**	**MTE MW6-08**	**MTE MW6-08**	**MTE MW7-08**	**MTE MW7-08**	**MTE MW7-08**	**MTE MW7-08**
					Sample ID	MW3-08D	MW3-08D	MW3-08D	MW3-08D	MW3-08I	MW3-08S	MW4-08	MW4-08D	MW4-08I	MW5-08	MW5-08D	MW5-08I	MW5-08S	MW6-08	MW6-08D	MW6-08I	MW6-08S	MW7-08	MW7-08D	MW7-08I	MW7-08S
					Start Depth (mbgs)							1.57			1.7				2				1.57			
					End Depth (mbgs)							4.57			4.57				4.57				4.57			
					Date	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																					
ABN	1,2,4-Trichlorobenzene	µg/L	180	180						0.002 U		0.3 U		0.04 U	1.2 U	0.002 U			0.6 U	0.002 U			3 U	0.09 U		
ABN	2,4-Dimethylphenol	µg/L	31000	39000																						
ABN	2,4-Dinitrophenol	µg/L	9000	11000																						
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																						
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																						
ABN	2-Chlorophenol	µg/L	2600	3300																						
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																						
ABN	4-Chloroaniline	µg/L	320	400																						
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																						
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																						
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																						
ABN	Diethylphthalate	µg/L	30	38																						
ABN	Dimethylphthalate	µg/L	30	38																						
ABN	Phenol	µg/L	9600	12000																						
BIOLOGICAL	Fecal coliform	µg/L																								
CHEMISTRY	Biochemical Oxygen Demand	µg/L																								
CHEMISTRY	Lab pH	pH UNITS									**8.14**				**7.69**			**8.39**	**7.4**			**8.77**	**7.76**			**7.98**
CHEMISTRY	Moisture, percent	%																								
CHEMISTRY	Nitrate (as N)	µg/L													0.04 U				0.04 U				0.04 U			
Chemistry	Nitrate as N	µg/L																								
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L																								
CHEMISTRY	Nitrite (as N)	µg/L													0.04 U				0.04 U				0.04 U			
CHEMISTRY	Total Suspended Solids	µg/L																								
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																						
CP	2,4,6-Trichlorophenol	µg/L	180	230																						
CP	2,4-Dichlorophenol	µg/L	3700	4600																						
CP	Pentachlorophenol	µg/L	50	62																						
INORGANIC	Antimony	µg/L	16000	20000							**2.4**				1 U			**8.89**	1 U			1.6 U	1 U			1.6 U
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000																						
INORGANIC	Arsenic	µg/L	1500	1900							**10.8**				**7.91**			**7.3**	**4.59**			**2**	**5.3**			**11.5**
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900																						
INORGANIC	Barium	µg/L	23000	29000							**126**				**158**			**107**	**208**			**28.99**	**246**			**158**
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000																						
INORGANIC	Beryllium	µg/L	53	67							**0.5**				1 U			0.39 U	1 U			0.39 U	1 U			**0.6**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67																						
INORGANIC	Boron	µg/L	36000	45000							**0.38**				**602**			**1.23**	**462**			**0.89**	**653.99**			**1.19**
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000																						
INORGANIC	Cadmium	µg/L	2.1	2.7							0.39 U				0.5 U			0.39 U	0.5 U			0.39 U	0.5 U			**0.6**
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7																						
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000																						
INORGANIC	Chromium	µg/L	640	810							14.9 U				13.5 U			13.8 U	8.12 U			7.19 U	11.1 U			27.89 U
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810																						
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140																						
INORGANIC	Cobalt	µg/L	52	66							**6.09**				**0.63**			**6.89**	**0.89**			**3.1**	**1.3**			**7.79**
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66																						
INORGANIC	Copper	µg/L	69	87							**119**				**1.78**			**49.6**	**4.6**			**19.9**	**0.96**			**138**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87																						
INORGANIC	Cyanide	µg/L	52	66							1 U				9.99 U			1 U	9.99 U			1 U	9.99 U			1 U
INORGANIC	Electrical Conductivity	ms/cm									**0.2**				**2.05**			**0.38**	**1.45**			**0.25**	**1.72**			**0.35**
INORGANIC	Lead	µg/L	20	25							**287.99**				0.5 U			**195.99**	**0.53**			**48.99**	**0.66**			**1140**
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25																						
INORGANIC	Mercury	µg/L	0.29	0.29							**0.87**				0.09 U			**0.6**	0.09 U			**0.11**	0.09 U			**0.8**
INORGANIC	Molybdenum	µg/L	7300	9200							**1.1**				**0.96**			**5.2**	**2.27**			**1.2**	**4.28**			**1.4**
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200																						
INORGANIC	Nickel	µg/L	390	490							**16**				**9.46**			**16.79**	**17.2**			**8.5**	**6.64**			**23.8**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490																						
INORGANIC	Selenium	µg/L	50	63							**0.89**				**6.01**			**0.79**	**3.68**			0.79 U	**2.21**			**1**
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63																						
INORGANIC	Silver	µg/L	1.2	1.5							0.39 U				0.5 U			0.39 U	0.5 U			0.39 U	0.5 U			**0.39**
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5																						
INORGANIC	Sodium	µg/L	1800000	2300000																						
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000																						
INORGANIC	Sodium Absorption Ratio	None									**0.16**							**0.87**				**2.45**				**0.44**
INORGANIC	Thallium	µg/L	400	510							0.39 U				0.5 U			0.39 U	0.5 U			0.39 U	0.5 U			0.39 U
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510																						
INORGANIC	Uranium (U)	µg/L	330	420																						
INORGANIC	Vanadium	µg/L	200	250							**19.8**				**3.71**			**20**	**1.61**			**10.2**	**1.13**			**30.8**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250																						
INORGANIC	Zinc	µg/L	890	1100							**201**				**13.7**			**127**	**14.6**			**139**	**6.05**			**230**
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100																						

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW4-08	MTE MW4-08	MTE MW4-08	MTE MW5-08	MTE MW5-08	MTE MW5-08	MTE MW5-08	MTE MW6-08	MTE MW6-08	MTE MW6-08	MTE MW6-08	MTE MW7-08	MTE MW7-08	MTE MW7-08	MTE MW7-08
					Sample ID	MW3-08D	MW3-08D	MW3-08D	MW3-08D	MW3-08I	MW3-08S	MW4-08	MW4-08D	MW4-08I	MW5-08	MW5-08D	MW5-08I	MW5-08S	MW6-08	MW6-08D	MW6-08I	MW6-08S	MW7-08	MW7-08D	MW7-08I	MW7-08S
					Start Depth (mbgs)							1.57			1.7				2				1.57			
					End Depth (mbgs)							4.57			4.57				4.57				4.57			
					Date	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008
OCP	Hexachlorobenzene	µg/L	3.1	3.1																						
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																						
OCP	Hexachloroethane	µg/L	94	94																						
other SVOC	2-Chloronaphthalene	µg/L																								
other SVOC	2-Hexanone	µg/L							0.47 U		0.3 U		0.26 U	1.2 U	0.47 U			0.6 U	0.47 U			3 U	0.52 U			
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																								
other SVOC	4-Chlorophenyl Phenylether	µg/L																								
other SVOC	Bis (2-chloroethoxy) methane	µg/L																								
other SVOC	Butyl benzyl phthalate	µg/L																								
other SVOC	Chloroethane	µg/L							0.005 U		0.19 U		0.07 U	**4.99**	0.005 U			**5.9**	0.005 U			2 U	0.16 U			
other SVOC	Chloromethane	µg/L							0.002 U		0.39 U		0.11 U	1.6 U	0.002 U			0.79 U	0.002 U			4 U	0.22 U			
other SVOC	Di-N-Butylphthalate	µg/L																								
other SVOC	Di-n-octyl phthalate	µg/L																								
other SVOC	Isophorone	µg/L																								
other SVOC	Nitrobenzene	µg/L																								
other SVOC	N-Nitrosodi-N-propylamine	µg/L																								
other SVOC	N-Nitrosodiphenylamine	µg/L																								
other SVOC	Perylene	µg/L																								
PAH	1-Methylnaphthalene	µg/L	1500	1800																						
PAH	2-Methylnaphthalene	µg/L	1500	1800																						
PAH	Acenaphthene	µg/L	600	600		**18.99**								**27**		**1.1**		**2.09**		**0.19**		**170**		**170**		
PAH	Acenaphthylene	µg/L	1.4	1.8	0.01 U									0.11 U		**0.62**		0.11 U		**0.04**		**7.49**		**37.99**		
PAH	Anthracene	µg/L	1	2.4				**9.3**						**3.19**		**0.72**		**0.36**		**0.31**		**15**		**349.99**		
PAH	Benzo(a)anthracene	µg/L	1.8	4.7				**4**						**0.63**		**2.2**		**0.15**		**0.31**		**2.4**		**319.99**		
PAH	Benzo(a)pyrene	µg/L	0.81	0.81				**2.79**						**0.33**		**2.7**		0.09 U		**0.31**		**1.5**		**209.99**		
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75																						
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75				**2.49**						**0.31**		**2.3**		**0.09**		**0.42**		**1.3**		**259.99**		
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2				**1.2**						**0.09**		**1.2**		0.05 U		**0.15**		**0.47**		**72.99**		
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4				**0.63**						**0.07**		**0.92**		0.05 U		**0.14**		**0.47**		**100**		
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																						
PAH	Chrysene	µg/L	0.7	1				**3.5**						**0.42**		**2.3**		**0.11**		**0.39**		**2.2**		**280**		
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52				**0.31**						0.09 U		**0.23**		0.09 U		**0.02**		**0.11**		**16**		
PAH	Fluoranthene	µg/L	73	130				**12**						**1.6**		**2.6**		**0.36**		**0.73**		**9.99**		**85**		
PAH	Fluorene	µg/L	290	400			**8.5**							**1.9**		**0.88**		**0.85**		**0.46**		**48.99**		**250**		
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2				**0.98**						**0.09**		**0.88**		**0.39**		**0.15**		**0.42**		**70**		
PAH	Naphthalene	µg/L	1400	1400										**769.99**		**0.81**		**21**		**0.86**		**2099.99**		**349.99**		
PAH	Phenanthrene	µg/L	380	580				**34**						**11**		**2.4**		**1.4**		**0.95**		**75**		**1300**		
PAH	Pyrene	µg/L	5.7	68				**16**						**1.9**		**3.7**		**0.41**		**0.92**		**11**		**720**		
PCB	PCB, Total	µg/L	0.2	7.8							0.19 U															
PHC	F1 (C6-C10)	µg/L	420	750					4.99 U		**1100**	4.99 U	**27**	5000 U	**28**	**209.99**		**2500**	**4.99**	**280**		**6599.99**	**899.99**	**779.99**		
PHC	F1-BTEX	µg/L	420	750																						
PHC	F2 (C10-C16)	µg/L	150	150					**29.99**		**1300**	9.99 U	**89**	**3700**	**85**	**1500**		**2099.99**	**9.99**	**550**		**76000**	**13000**	**4000**		
PHC	F3 (C16-C34)	µg/L	500	500					50 U		**349.99**	50 U	**55**	**6400**	**61.99**	**8699.99**		**6900**	**50**	**3800**		**120000**	**20000**	**23000**		
PHC	F4 (C34-C50)	µg/L	500	500					50 U		100 U	50 U	50 U	**1500**	50 U	**980**		**569.99**	**50**	**410**		**2900**	**2900**	**4300**		
PHC	Chrom. to baseline at nC50	None																								
SVOC	Benzo(e)pyrene	µg/L																								
SVOC	Hexachlorocyclopentadiene	µg/L																								
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3					0.002 U		0.09 U		0.03 U	0.39 U	0.002 U			0.19 U	0.002 U			1 U	0.07 U			
VOC	1,1,1-Trichloroethane	µg/L	640	640					0.002 U		0.3 U		0.04 U	1.2 U	0.002 U			0.6 U	0.002 U			3 U	0.09 U			
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2					0.004 U		0.09 U		0.09 U	0.39 U	0.004 U			0.19 U	0.004 U			1 U	0.09 U			
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7							0.19 U			0.79 U				0.39 U				2 U				
VOC	1,1-Dichloroethane	µg/L	320	320					0.002 U		0.3 U		0.01 U	**7.4**	0.002 U			**3**	0.002 U			3 U	0.03 U			
VOC	1,1-Dichloroethene	µg/L	1.6	1.6					0.002 U		0.3 U		0.04 U	1.2 U	0.002 U			0.6 U	0.002 U			3 U	0.09 U			
VOC	1,2-Dibromoethane	µg/L	0.25	0.25					0.002 U		0.19 U		0.03 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.07 U			
VOC	1,2-Dichlorobenzene	µg/L	4600	4600					0.002 U		0.09 U		0.04 U	**34**	0.002 U			**25**	0.002 U			1 U	0.09 U			
VOC	1,2-Dichloroethane	µg/L	1.6	1.6					0.002 U		0.19 U		0.02 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.05 U			
VOC	1,2-Dichloroethene (Total)	µg/L																								
VOC	1,2-Dichloropropane	µg/L	16	16					0.002 U		0.19 U		0.02 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.05 U			
VOC	1,3-Dichlorobenzene	µg/L	7600	9600					0.002 U		0.09 U		0.04 U	**2.7**	0.002 U			**1.6**	0.002 U			1 U	0.09 U			
VOC	1,3-Dichloropropene	µg/L	5.2	5.2					0.002 U		0.3 U		0.03 U	1.2 U	0.002 U			0.6 U	0.002 U			3 U	0.07 U			
VOC	1,4-Dichlorobenzene	µg/L	8	8					0.002 U		0.09 U		0.04 U	**3.8**	0.002 U			**3.1**	0.002 U			1 U	0.09 U			
VOC	2-Butanone	µg/L	470000	470000					0.04 U		0.89 U		0.26 U	3.59 U	0.04 U			1.8 U	0.04 U			8.99 U	**18.99**			
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000					0.04 U		0.3 U		**11**	1.2 U	0.04 U			0.6 U	0.04 U			3 U	0.57 U			
VOC	Acetone	µg/L	100000	130000					**2.49**		0.5 U		0.47 U	2 U	0.13 U			1 U	0.13 U			4.99 U	0.94 U			
VOC	Benzene	µg/L	44	44					**0.18**		**35.99**	0.09 U	0.02 U	**759.99**	**0.65**	**0.52**		**79.99**	**0.004**	**0.15**		**3000**	**21**	**35**		
VOC	Bromodichloromethane	µg/L	67000	85000					0.003 U		0.19 U		0.03 U	0.79 U	0.003 U			0.39 U	0.003 U			2 U	0.07 U			
VOC	Bromoform	µg/L	380	380					0.002 U		0.09 U		0.02 U	0.39 U	0.002 U			0.19 U	0.002 U			1 U	0.05 U			
VOC	Bromomethane	µg/L	5.6	5.6					0.002 U		0.19 U		0.09 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.18 U			
VOC	Carbon tetrachloride	µg/L	0.79	0.79					0.002 U		0.19 U		0.04 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.09 U			
VOC	Chlorobenzene	µg/L	500	630					0.002 U		0.09 U		0.04 U	0.39 U	0.002 U			**9.99**	**0.005**			1 U	0.09 U			
VOC	Chlorodibromomethane	µg/L	65000	82000					0.003 U		0.09 U		0.02 U	0.39 U	0.003 U			0.19 U	0.003 U			1 U	0.05 U			
VOC	Chloroform	µg/L	2.4	2.4					0.002 U		0.19 U		0.03 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.07 U			
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6					0.002 U		**0.36**		0.01 U	0.79 U	0.002 U			0.39 U	0.002 U			2 U	0.39 U			
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2					0.002 U		0.19 U		0.04 U	0.79 U	0.002 U			0.6 U	0.002 U			2 U	0.09 U			

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW3-08	MTE MW4-08	MTE MW4-08	MTE MW4-08	MTE MW5-08	MTE MW5-08	MTE MW5-08	MTE MW5-08	MTE MW6-08	MTE MW6-08	MTE MW6-08	MTE MW6-08	MTE MW7-08	MTE MW7-08	MTE MW7-08	MTE MW7-08
					Sample ID	MW3-08D	MW3-08D	MW3-08D	MW3-08D	MW3-08I	MW3-08S	MW4-08	MW4-08D	MW4-08I	MW5-08	MW5-08D	MW5-08I	MW5-08S	MW6-08	MW6-08D	MW6-08I	MW6-08S	MW7-08	MW7-08D	MW7-08I	MW7-08S
					Start Depth (mbgs)							1.57			1.7				2				1.57			
					End Depth (mbgs)							4.57			4.57				4.57				4.57			
					Date	20 Nov 2008	21 Nov 2008	22 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	23 Nov 2008	19 Nov 2008	19 Nov 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008
VOC	Dichlorodifluoromethane	µg/L	3500	4400																						
VOC	Dichloromethane	µg/L	610	610						0.01 U		0.3 U		0.04 U	1.2 U	0.01 U			0.6 U	0.01 U			3 U	0.09 U		
VOC	Ethylbenzene	µg/L	1800	2300						**0.01**		**6.69**	0.07 U	0.13 U	**2900**	0.009 U	**0.23**		**180**	**0.006**	**1.3**		**1900**	**170**	**29.99**	
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190						0.004 U		0.19 U		0.05 U	0.79 U	0.004 U			0.39 U	0.004 U			2 U	0.12 U		
VOC	n-Hexane	µg/L	51	51																						
VOC	Styrene	µg/L	1300	1300						0.002 U		0.09 U		0.04 U	0.39 U	0.002 U			0.19 U	0.002 U			1 U	0.09 U		
VOC	Tetrachloroethene	µg/L	1.6	1.6						0.007 U		0.19 U		0.07 U	0.79 U	0.007 U			0.39 U	0.007 U			2 U	0.16 U		
VOC	Toluene	µg/L	14000	18000						**0.01**		**5.2**	0.04 U	0.05 U	**120**	0.009 U	**3.89**		**48.99**	**0.006**	**4.49**		**340**	**170**	**100**	
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6						0.003 U		0.19 U		0.04 U	0.79 U	0.003 U			**1.3**	0.003 U			2 U	0.09 U		
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2						0.003 U		0.3 U		0.03 U	1.2 U	0.003 U			0.6 U	0.003 U			3 U	0.07 U		
VOC	Trichloroethylene	µg/L	1.6	1.6						0.004 U		0.19 U		0.39 U	0.79 U	0.004 U			0.39 U	0.004 U			2 U	0.03 U		
VOC	Trichlorofluoromethane	µg/L	2000	2500						0.004 U		0.39 U		0.07 U	1.6 U	0.004 U			0.79 U	0.004 U			4 U	0.07 U		
VOC	Vinyl Chloride	µg/L	0.5	0.5						0.002 U		0.17 U		0.09 U	**2.9**	0.002 U			**0.89**	0.002 U			1.7 U	0.09 U		
VOC	Xylene, o	µg/L	3300	4200						**0.006**		**3.4**		**0.07**	**470**	**0.89**			**88**	**0.005**			**310**	**52**		
VOC	Xylenes, m & p	µg/L	3300	4200						**0.005**		**9.3**		**0.23**	**1100**	**2.09**			**600**	**0.003**			**639.99**	**170**		
VOC	Xylenes, Total	µg/L	3300	4200						**0.009**		**13**	0.07 U	**0.31**	**1600**	**3**	**12**		**690**	**0.008**	**22**		**949.99**	**220**	**83.99**	

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**MTE MW8-08**	**MTE MW8-08**	**MTE MW8-08**	**MTE MW9-08**	**MTE MW9-08**	**MTE MW9-08**	**MTE MW9-08**	**OHE BH1/MW2**	**OHE BH3/MW3**	**OHE BH5/MW1**	**OHE BH7/MW4**	**SLR BH102**	**SLR BH108**	**SLR BH111**	**SLR BH112**	**SLR BH114**	**SLR BH115**	**SLR BH118**	**SLR BH120**	**SLR BH121**	**SLR BH121**
					Sample ID	MW8-08	MW8-08D	MW8-08S	MW9-09	MW9-09D	MW9-09I	MW9-09S	BH1/MW2	BH3/MW3	BH5/MW1	BH7/MW4	BH 102	BH 108	BH111	BH112	BH 114	BH 115	BH 118	BH 120	BH 121	DUP A-030509
					Start Depth (mbgs)	1.77			2.3				0.9		2.2	1.2										
					End Depth (mbgs)	4.57			4.57				4.6		3.7	3.7										
					Date	18 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	03 Jul 2009	03 Jul 2009	03 Jul 2009	12 Aug 2009	11 Mar 2009	18 Dec 2008	07 Dec 2008	07 Dec 2008	02 Jan 2009	23 Dec 2008	23 Dec 2008	31 Dec 2008	05 Mar 2009	05 Mar 2009
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																						
ABN	1,2,4-Trichlorobenzene	µg/L	180	180	0.3 U	0.002 U		0.3 U	0.002 U			0.6 U	0.6 U	0.3 U	0.3 U										
ABN	2,4-Dimethylphenol	µg/L	31000	39000																					
ABN	2,4-Dinitrophenol	µg/L	9000	11000																					
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																					
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																					
ABN	2-Chlorophenol	µg/L	2600	3300																					
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																					
ABN	4-Chloroaniline	µg/L	320	400																					
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																					
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																					
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																					
ABN	Diethylphthalate	µg/L	30	38																					
ABN	Dimethylphthalate	µg/L	30	38																					
ABN	Phenol	µg/L	9600	12000																					
BIOLOGICAL	Fecal coliform	µg/L																							
CHEMISTRY	Biochemical Oxygen Demand	µg/L																							
CHEMISTRY	Lab pH	pH UNITS			**7.59**		**8.4**	**7.67**			**8.22**														
CHEMISTRY	Moisture, percent	%																							
CHEMISTRY	Nitrate (as N)	µg/L			0.04 U			0.04 U																	
Chemistry	Nitrate as N	µg/L															**100**	**2950**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L															**100**	**2950**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
CHEMISTRY	Nitrite (as N)	µg/L			0.04 U			0.04 U									**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
CHEMISTRY	Total Suspended Solids	µg/L																							
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																					
CP	2,4,6-Trichlorophenol	µg/L	180	230																					
CP	2,4-Dichlorophenol	µg/L	3700	4600																					
CP	Pentachlorophenol	µg/L	50	62																					
INORGANIC	Antimony	µg/L	16000	20000	1 U		1.6 U	**2.85**			1.6 U	**2.12**		**1.83**	**1.65**										
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000													**0.5**	**0.5**	**0.5**	**0.5**	**0.8**	**0.98**	**0.5**	**0.5**	**0.56**	**0.5**
INORGANIC	Arsenic	µg/L	1500	1900	**11.1**		**1.7**	**50.79**			**9.7**	**23.6**		**26.5**	**8.58**											
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900													**2.3**	**1**	**1**	**1.1**	**1.9**	**13**	**1**	**5.2**	**5**	**5**
INORGANIC	Barium	µg/L	23000	29000	**152**		**25.5**	**261**			**50**	**219**		**104**	**195.99**											
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000													**130**	**160**	**70**	**200**	**270**	**44**	**180**	**76**	**310**	**310**
INORGANIC	Beryllium	µg/L	53	67	1 U		**0.39**	1 U			0.39 U	1 U		1 U	1 U											
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67													**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**
INORGANIC	Boron	µg/L	36000	45000	**368**		**0.44**	**967**			**0.34**	**1020**		**102**	**412.99**											
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000													**190**	**150**	**270**	**150**	**85**	**85**	**42**	**120**	**180**	**180**
INORGANIC	Cadmium	µg/L	2.1	2.7	0.5 U		0.39 U	0.5 U			0.39 U	0.5 U		0.5 U	0.5 U											
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7													**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000													**190000**	**590000**	**38000**	**310000**	**83000**	**390000**	**730000**	**280000**	**1400000**	**1300000**
INORGANIC	Chromium	µg/L	640	810	10.1 U		5.5 U	9.44 U			37.3 U	**6.79**		**2.7**	**2.42**											
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810													**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**25**	**5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140													**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
INORGANIC	Cobalt	µg/L	52	66	**2.41**		**2.6**	**1.3**			**5.5**	**5.4**		**0.69**	**2.54**											
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66													**5.4**	**0.5**	**1.7**	**2.5**	**2.5**	**0.5**	**2.2**	**13**	**8.8**	**8.8**
INORGANIC	Copper	µg/L	69	87	**1.3**		**22**	**1.42**			**57.79**	**6.57**		**1.99**	**1.07**											
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87													**1**	**1**	**1**	**1**	**1**	**1**	**1.1**	**4.6**	**1**	**1.3**
INORGANIC	Cyanide	µg/L	52	66	9.99 U		1 U	9.99 U			1 U						**2**	**2**	**3**	**3**	**2**	**2**	**2**	**2**	**2**	**2**
INORGANIC	Electrical Conductivity	ms/cm			**1**		**0.13**	**1.32**			**0.2**															
INORGANIC	Lead	µg/L	20	25	**1.18**		**29.2**	**1.12**			**56.6**	**1.59**		**4.5**	**0.82**											
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25													**1.8**	**0.5**	**0.5**	**1.7**	**0.5**	**0.5**	**0.5**	**0.73**	**0.74**	**0.64**
INORGANIC	Mercury	µg/L	0.29	0.29	0.09 U		**0.12**	0.09 U			**0.13**						**0.02**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
INORGANIC	Molybdenum	µg/L	7300	9200	**3.22**		0.5 U	**4.9**			**5.2**	**3.86**		**3.98**	**4.08**											
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200													**3.6**	**1**	**1**	**1**	**1.6**	**25**	**1**	**8.9**	**1.8**	**1.6**
INORGANIC	Nickel	µg/L	390	490	**10.6**		**6.39**	**20**			**28.2**	**84.79**		**6.45**	**30.99**											
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490													**9.6**	**1.4**	**1**	**5**	**5**	**3.7**	**1.3**	**25**	**12**	**11**
INORGANIC	Selenium	µg/L	50	63	**1.5**		0.79 U	**2.36**			0.79 U	**2.08**		**1.75**	**2.09**											
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63													**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
INORGANIC	Silver	µg/L	1.2	1.5	0.5 U		0.39 U	0.5 U			0.39 U	0.5 U		0.5 U	0.5 U											
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5													**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
INORGANIC	Sodium	µg/L	1800000	2300000																						
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000													**90000**	**540000**	**34000**	**180000**	**87000**	**230000**	**330000**	**280000**	**950000**	**1100000**
INORGANIC	Sodium Absorption Ratio	None					**0.39**				**0.3**															
INORGANIC	Thallium	µg/L	400	510	0.5 U		0.39 U	0.5 U			0.39 U	0.5 U		0.5 U	0.5 U											
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510													**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.12**	**0.56**	**0.05**	**0.05**
INORGANIC	Uranium (U)	µg/L	330	420																						
INORGANIC	Vanadium	µg/L	200	250	**1.27**		**10.9**	**2.64**			**12.8**	**4.19**		**4.59**	**2.6**											
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250													**1**	**1.2**	**1**	**1.7**	**1**	**2.4**	**1.2**	**1.5**	**5**	**5**
INORGANIC	Zinc	µg/L	890	1100	**69.39**		**42.8**	**88.29**			**68.09**	**52.8**		**10.6**	**5.99**											
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100													**5**	**12**	**9.4**	**5**	**19**	**5**	**6.9**	**5**	**5**	**5**

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	MTE MW8-08	MTE MW8-08	MTE MW8-08	MTE MW9-08	MTE MW9-08	MTE MW9-08	MTE MW9-08	OHE BH1/MW2	OHE BH3/MW3	OHE BH5/MW1	OHE BH7/MW4	SLR BH102	SLR BH108	SLR BH111	SLR BH112	SLR BH114	SLR BH115	SLR BH118	SLR BH120	SLR BH121	SLR BH121
					Sample ID	MW8-08	MW8-08D	MW8-08S	MW9-09	MW9-09D	MW9-09I	MW9-09S	BH1/MW2	BH3/MW3	BH5/MW1	BH7/MW4	BH 102	BH 108	BH111	BH112	BH 114	BH 115	BH 118	BH 120	BH 121	DUP A-030509
					Start Depth (mbgs)	1.77			2.3				0.9		2.2	1.2										
					End Depth (mbgs)	4.57			4.57				4.6		3.7	3.7										
					Date	18 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	03 Jul 2009	03 Jul 2009	03 Jul 2009	12 Aug 2009	11 Mar 2009	18 Dec 2008	07 Dec 2008	07 Dec 2008	02 Jan 2009	23 Dec 2008	23 Dec 2008	31 Dec 2008	05 Mar 2009	05 Mar 2009
OCP	Hexachlorobenzene	µg/L	3.1	3.1																					
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																					
OCP	Hexachloroethane	µg/L	94	94																					
other SVOC	2-Chloronaphthalene	µg/L																							
other SVOC	2-Hexanone	µg/L			0.3 U	0.47 U		0.3 U	0.47 U																
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																							
other SVOC	4-Chlorophenyl Phenylether	µg/L																							
other SVOC	Bis (2-chloroethoxy) methane	µg/L																							
other SVOC	Butyl benzyl phthalate	µg/L																							
other SVOC	Chloroethane	µg/L			0.19 U	0.005 U		**3.5**	0.005 U																
other SVOC	Chloromethane	µg/L			0.39 U	0.002 U		0.39 U	0.002 U																
other SVOC	Di-N-Butylphthalate	µg/L																							
other SVOC	Di-n-octyl phthalate	µg/L																							
other SVOC	Isophorone	µg/L																							
other SVOC	Nitrobenzene	µg/L																							
other SVOC	N-Nitrosodi-N-propylamine	µg/L																							
other SVOC	N-Nitrosodiphenylamine	µg/L																							
other SVOC	Perylene	µg/L																							
PAH	1-Methylnaphthalene	µg/L	1500	1800													**170**	0.05	0.12	47	0.85	1.2	0.05	0.65	0.08	0.17
PAH	2-Methylnaphthalene	µg/L	1500	1800													**110**	0.05	0.07	8.6	0.43	0.42	0.05	0.27	0.06	0.09
PAH	Acenaphthene	µg/L	600	600	**29.99**	**0.12**		**14**		0.02 U							15	0.05	0.07	2.9	1.9	1.8	0.05	1.5	0.05	0.29
PAH	Acenaphthylene	µg/L	1.4	1.8	0.11 U	**0.3**		**0.36**		0.01 U							**4**	0.05	0.13	0.2	0.05	**2**	0.05	0.05	0.09	0.14
PAH	Anthracene	µg/L	1	2.4	**4.3**	**0.34**		**2.4**		0.01 U							**7.1**	0.05	0.09	0.44	0.27	**3.1**	0.05	0.21	0.13	0.2
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.26**	**1.4**		**0.46**		**0.01**							1.8	0.05	0.3	0.09	0.05	3.3	0.05	0.05	0.37	0.39
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	0.09 U	**2**		**0.66**		**0.05**							**1.4**	0.01	0.28	0.04	0.01	**3.7**	0.02	0.01	0.33	0.31
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75													**1.5**	0.05	0.36	0.06	0.05	**4**	0.05	0.05	0.41	0.36
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75	0.04 U	**2.49**		**0.6**		**0.07**																
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	0.05 U	**1.4**		**0.36**		**0.07**							**1**	0.1	0.22	0.1	0.1	3.2	0.1	0.1	0.28	0.22
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**0.6**	**0.83**		**0.19**		**0.02**							**0.58**	0.05	0.12	0.05	0.05	**1.3**	0.05	0.05	0.15	0.14
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																						
PAH	Chrysene	µg/L	0.7	1	**0.17**	**1.5**		**0.42**		**0.03**							**1.6**	0.05	0.21	0.06	0.05	**3.2**	0.05	0.05	0.27	0.28
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	0.09 U	**0.34**		0.09 U		0.01 U							**1**	0.1	0.1	0.1	0.1	0.32	0.1	0.1	0.1	0.1
PAH	Fluoranthene	µg/L	73	130	**2**	**2.3**		**1.8**		**0.01**							6.2	0.05	0.31	0.31	0.26	11	0.05	0.27	0.77	1
PAH	Fluorene	µg/L	290	400	**11**	**0.13**		**5.79**		0.19 U							20	0.05	0.05	3.9	0.76	2.7	0.05	0.58	0.08	0.16
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	0.02 U	**1.3**		**0.33**		**0.05**							**1**	0.1	0.23	0.1	0.1	**2.7**	0.1	0.1	0.24	0.22
PAH	Naphthalene	µg/L	1400	1400	**130**	**0.22**		**28.99**		**0.02**							23	0.05	0.12	5.7	0.34	2.1	0.05	0.18	0.23	0.18
PAH	Phenanthrene	µg/L	380	580	**17.99**	**1.1**		**12**		**0.01**							50	0.05	0.2	1.4	0.76	12	0.05	0.47	0.24	0.33
PAH	Pyrene	µg/L	5.7	68	**2**	**2.7**		**2**		**0.02**							6.8	0.05	0.35	0.31	0.27	11	0.06	0.29	0.92	1.1
PCB	PCB, Total	µg/L	0.2	7.8											0.19 U	**0.19**										
PHC	F1 (C6-C10)	µg/L	420	750	110 U	**46**		**790**	4.99 U	4.99 U			100 U	100 U	100 U	**3400**	**3200**	100	100	**1600**	100	100	100	100	610	650
PHC	F1-BTEX	µg/L	420	750													**3000**	100	100	**1500**	100	100	100	100	610	650
PHC	F2 (C10-C16)	µg/L	150	150	**100**	**56**		**910**	9.99 U	9.99 U			100 U	100 U	100 U	**1700**	**14000**	100	100	**1500**	100	100	100	100	740	480
PHC	F3 (C16-C34)	µg/L	500	500	100 U	**2500**		**2099.99**	50 U	50 U			100 U	100 U	100 U	**4599.99**	**2600**	100	100	190	100	100	100	100	100	100
PHC	F4 (C34-C50)	µg/L	500	500	100 U	**560**		**150**	50 U	50 U			100 U	100 U	100 U	100 U	**100**	100	100	100	100	100	100	100	100	100
PHC	Chrom. to baseline at nC50	None															Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SVOC	Benzo(e)pyrene	µg/L																								
SVOC	Hexachlorocyclopentadiene	µg/L																								
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	0.09 U	0.002 U		0.09 U	0.002 U				0.19 U	0.19 U	0.09 U	0.09 U	**5**	0.1	0.1	1	0.2				1	1
VOC	1,1,1-Trichloroethane	µg/L	640	640	0.3 U	0.002 U		0.3 U	0.002 U				0.6 U	0.6 U	0.3 U	0.3 U	5	0.1	0.1	1	0.2				1	1
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	0.09 U	0.004 U		0.09 U	0.004 U				0.19 U	0.19 U	0.09 U	0.09 U	**10**	0.2	0.2	2	0.4				2	2
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	0.19 U			0.19 U					0.39 U	0.39 U	0.19 U	0.19 U	**10**	0.2	0.2	2	0.4				2	2
VOC	1,1-Dichloroethane	µg/L	320	320	0.3 U	0.002 U		**2.9**	0.002 U				0.6 U	**0.83**	**1.1**	**1**	5	0.1	0.1	1	0.2				1	1
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	**0.36**	0.002 U		0.3 U	0.002 U				0.6 U	0.6 U	0.3 U	0.3 U	**5**	0.1	0.1	1	0.2				1	1
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	**10**	0.2	0.2	2	0.4				2	2
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	**0.69**	0.002 U		**6.6**	0.002 U				0.19 U	0.19 U	0.09 U	**3**	10	0.2	0.2	2	0.4				2	2
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	**0.62**	**10**	0.2	0.2	6	0.4				2	2
VOC	1,2-Dichloroethene (Total)	µg/L																								
VOC	1,2-Dichloropropane	µg/L	16	16	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	5	0.1	0.1	2.7	0.2				1	1
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	0.09 U	0.002 U		**0.42**	0.002 U				0.19 U	0.19 U	0.09 U	**0.26**	10	0.2	0.2	2	0.4				2	2
VOC	1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U	0.002 U		0.3 U	0.002 U				0.6 U	0.6 U	0.3 U	0.3 U										
VOC	1,4-Dichlorobenzene	µg/L	8	8	0.09 U	0.002 U		**0.65**	0.002 U				0.19 U	0.19 U	0.09 U	**0.53**	**10**	0.2	0.2	2	0.4				2	2
VOC	2-Butanone	µg/L	470000	470000	0.89 U	0.04 U		0.89 U	0.04 U				2 U	2 U	1 U	1 U	**250**	5	5	50	16				50	50
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	0.3 U	0.04 U		0.3 U	0.04 U				2 U	2 U	0.09 U	0.19 U	**250**	5	5	50	10				50	50
VOC	Acetone	µg/L	100000	130000	0.5 U	0.13 U		**1200**	0.13 U				2 U	2 U	1 U	0.09 U	**500**	10	10	100	120				100	100
VOC	Benzene	µg/L	44	44	**11**	0.002 U		**13**	0.002 U	0.09 U			0.39 U	0.39 U	0.19 U	**0.39**	**220**	0.1	0.1	**130**	2.3	3.9	0.2	0.2	4	2.9
VOC	Bromodichloromethane	µg/L	67000	85000	0.19 U	0.003 U		0.19 U	0.003 U				0.39 U	0.39 U	0.19 U	1 U	5	0.1	0.1	1	0.2				1	1
VOC	Bromoform	µg/L	380	380	0.09 U	0.002 U		0.09 U	0.002 U				0.19 U	0.19 U	0.09 U	0.09 U	**10**	0.2	0.2	2	0.4				2	2
VOC	Bromomethane	µg/L	5.6	5.6	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	**25**	0.5	0.5	5	1				5	5
VOC	Carbon tetrachloride	µg/L	0.79	0.79	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	**5**	0.1	0.1	**1**	0.2				1	1
VOC	Chlorobenzene	µg/L	500	630	0.09 U	0.002 U		0.09 U	0.002 U				0.19 U	0.19 U	0.09 U	**0.42**	5	0.1	0.1	1	0.2				1	1
VOC	Chlorodibromomethane	µg/L	65000	82000	0.09 U	0.003 U		0.09 U	0.003 U				0.19 U	0.19 U	0.09 U	0.09 U	10	0.2	0.2	2	0.4				2	2
VOC	Chloroform	µg/L	2.4	2.4	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	**5**	0.1	0.1	1	0.2				1	1
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	0.19 U	0.002 U		0.19 U	0.002 U				0.39 U	0.39 U	0.19 U	0.19 U	**5**	0.1	0.1	1	**40**				1	1
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	0.19 U	0.002 U		6.5 U	0.002 U								**10**	0.2	0.2	2	0.4				2	2

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**MTE MW8-08**	**MTE MW8-08**	**MTE MW8-08**	**MTE MW9-08**	**MTE MW9-08**	**MTE MW9-08**	**MTE MW9-08**	**OHE BH1/MW2**	**OHE BH3/MW3**	**OHE BH5/MW1**	**OHE BH7/MW4**	**SLR BH102**	**SLR BH108**	**SLR BH111**	**SLR BH112**	**SLR BH114**	**SLR BH115**	**SLR BH118**	**SLR BH120**	**SLR BH121**	**SLR BH121**
					Sample ID	MW8-08	MW8-08D	MW8-08S	MW9-09	MW9-09D	MW9-09I	MW9-09S	BH1/MW2	BH3/MW3	BH5/MW1	BH7/MW4	BH 102	BH 108	BH111	BH112	BH 114	BH 115	BH 118	BH 120	BH 121	DUP A-030509
					Start Depth (mbgs)	1.77			2.3				0.9		2.2	1.2										
					End Depth (mbgs)	4.57			4.57				4.6		3.7	3.7										
					Date	18 Dec 2008	17 Dec 2008	17 Dec 2008	18 Dec 2008	17 Dec 2008	17 Dec 2008	17 Dec 2008	03 Jul 2009	03 Jul 2009	03 Jul 2009	12 Aug 2009	11 Mar 2009	18 Dec 2008	07 Dec 2008	07 Dec 2008	02 Jan 2009	23 Dec 2008	23 Dec 2008	31 Dec 2008	05 Mar 2009	05 Mar 2009
VOC	Dichlorodifluoromethane	µg/L	3500	4400																					
VOC	Dichloromethane	µg/L	610	610	0.3 U	0.01 U		0.3 U	0.01 U			0.6 U	0.6 U	0.3 U	0.3 U	**65**	**22**	**0.5**	**5**	**3.9**				**5**	**5**
VOC	Ethylbenzene	µg/L	1800	2300	**14**	**0.002**		**75.99**	**0.002**	0.07 U		0.39 U	0.39 U	0.19 U	1 U	**23**	**0.1**	**0.1**	**35**	**0.2**	**0.2**	**0.2**	**0.2**	**1**	**1**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	0.19 U	0.004 U		0.19 U	0.004 U			0.39 U	0.39 U	0.19 U	0.19 U	**10**	**0.2**	**0.2**	**2**	**1.3**				**2**	**2**
VOC	n-Hexane	µg/L	51	51																					
VOC	Styrene	µg/L	1300	1300	0.09 U	0.002 U		0.09 U	0.002 U			0.19 U	0.19 U	0.09 U	0.09 U	**10**	**0.2**	**0.2**	**2**	**0.4**				**2**	**2**
VOC	Tetrachloroethene	µg/L	1.6	1.6	0.19 U	0.007 U		0.19 U	0.007 U			0.39 U	0.39 U	0.19 U	**0.23**	**5**	**0.1**	**0.1**	**1**	**0.2**				**1**	**1**
VOC	Toluene	µg/L	14000	18000	**0.98**	**0.002**		**5.29**	**0.002**	0.04 U		0.39 U	0.39 U	0.19 U	2.09 U	**10**	**0.2**	**0.2**	**6.9**	**0.4**	**0.66**	**0.2**	**0.2**	**2**	**2**
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	0.19 U	0.003 U		0.19 U	0.003 U			0.39 U	0.39 U	0.19 U	0.19 U	**5**	**0.1**	**0.1**	**1**	**1.4**				**1**	**1**
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	0.3 U	0.003 U		0.3 U	0.003 U							**10**	**0.2**	**0.2**	**2**	**0.4**				**2**	**2**
VOC	Trichloroethylene	µg/L	1.6	1.6	0.19 U	0.004 U		0.19 U	0.004 U			0.39 U	0.39 U	0.19 U	0.19 U	**5**	**0.1**	**0.1**	**1**	**0.79**				**1**	**1**
VOC	Trichlorofluoromethane	µg/L	2000	2500	0.39 U	0.004 U		0.39 U	0.004 U																
VOC	Vinyl Chloride	µg/L	0.5	0.5	0.17 U	0.002 U		0.17 U	0.002 U			0.34 U	0.34 U	0.17 U	0.17 U	**10**	**0.2**	**0.2**	**2**	**39**				**2**	**2**
VOC	Xylene, o	µg/L	3300	4200	**2**	0.002 U		**5.1**	0.002 U							**5**	**0.1**	**0.1**	**2**	**0.24**	**0.31**	**0.2**	**0.2**	**1**	**1**
VOC	Xylenes, m & p	µg/L	3300	4200	**2**	0.002 U		**12**	0.002 U							**5.2**	**0.1**	**0.1**	**9.6**	**0.2**	**0.46**	**0.4**	**0.4**	**1**	**1**
VOC	Xylenes, Total	µg/L	3300	4200	**4**	0.002 U		**17**	0.002 U	0.07 U		0.39 U	0.39 U	0.19 U	7.79 U	**5.2**	**0.1**	**0.1**	**12**	**0.24**	**0.77**	**0.4**	**0.4**	**1**	**1**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a.] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**SLR BH122**	**SLR BH122**	**SLR BH123**	**SLR BH123**	**SLR BH123**	**SLR BH124**	**SLR BH124**	**SLR BH125**	**SLR BH125**	**SLR BH125**	**SLR BH127**	**SLR BH128**	**SLR BH130**	**SLR BH136**	**SLR BH137**	**SLR BH138**	**SLR BH139**	**SLR BH140**	**SLR BH141**	**SLR BH142**	**SLR BH143**	**SLR BH144**
					Sample ID	BH 122	BH 122-030809	BH 123	BH 123-030809	DUP C	BH 124	BH 124-030809	BH 125	BH 125-030809	DUP B-030809	BH127	BH 128	BH 130	BH 136	BH 137	BH 138	BH 139	BH 140	BH 141	BH 142	BH 143	BH 144
					Start Depth (mbgs)																					
					End Depth (mbgs)																					
					Date	28 Dec 2008	08 Mar 2009	28 Dec 2008	08 Mar 2009	08 Mar 2009	28 Dec 2008	08 Mar 2009	29 Dec 2008	08 Mar 2009	08 Mar 2009	10 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	05 Dec 2008	05 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	05 Dec 2008	05 Dec 2008
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																						
ABN	1,2,4-Trichlorobenzene	µg/L	180	180																						
ABN	2,4-Dimethylphenol	µg/L	31000	39000																						
ABN	2,4-Dinitrophenol	µg/L	9000	11000																						
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																						
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																						
ABN	2-Chlorophenol	µg/L	2600	3300																						
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																						
ABN	4-Chloroaniline	µg/L	320	400																						
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																						
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																						
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																						
ABN	Diethylphthalate	µg/L	30	38																						
ABN	Dimethylphthalate	µg/L	30	38																						
ABN	Phenol	µg/L	9600	12000																						
BIOLOGICAL	Fecal coliform	µg/L																								
CHEMISTRY	Biochemical Oxygen Demand	µg/L																								
CHEMISTRY	Lab pH	pH UNITS																								
CHEMISTRY	Moisture, percent	%																								
CHEMISTRY	Nitrate (as N)	µg/L																								
Chemistry	Nitrate as N	µg/L			**100**		**100**			**420**		**100**			**550**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**128000**	**100**	**100**
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L			**100**		**100**			**420**		**100**			**550**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**128000**	**110**	**100**
CHEMISTRY	Nitrite (as N)	µg/L			**10**		**10**			**10**		**10**			**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**44**	**18**	**10**
CHEMISTRY	Total Suspended Solids	µg/L																								
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																						
CP	2,4,6-Trichlorophenol	µg/L	180	230																						
CP	2,4-Dichlorophenol	µg/L	3700	4600																						
CP	Pentachlorophenol	µg/L	50	62																						
INORGANIC	Antimony	µg/L	16000	20000																						
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	**0.5**		**5**			**0.5**		**0.74**			**0.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**0.95**	**5**	**0.5**	**5**	**0.5**	**0.5**
INORGANIC	Arsenic	µg/L	1500	1900																						
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**2.3**		**10**			**1**		**5.8**			**5**	**10**	**10**	**1**	**1.3**	**5.2**	**8.7**	**10**	**7.8**	**10**	**1**	**2.2**
INORGANIC	Barium	µg/L	23000	29000																						
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**820**		**990**			**18**		**490**			**630**	**740**	**690**	**110**	**160**	**300**	**21**	**140**	**160**	**56**	**1300**	**360**
INORGANIC	Beryllium	µg/L	53	67																						
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	**0.5**		**5**			**0.5**		**0.5**			**0.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**0.5**	**5**	**0.5**	**5**	**0.5**	**0.5**
INORGANIC	Boron	µg/L	36000	45000																						
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**380**		**160**			**21**		**120**			**300**	**660**	**720**	**130**	**280**	**230**	**48**	**340**	**110**	**130**	**190**	**130**
INORGANIC	Cadmium	µg/L	2.1	2.7																						
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	**0.1**		**1**			**0.1**		**0.1**			**0.11**	**1**	**1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**1**	**0.1**	**0.1**
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000	**450000**		**1600000**			**53000**		**560000**			**1200000**	**2300000**	**2500000**	**160000**	**110000**	**110000**	**22000**	**300000**	**20000**	**67000**	**190000**	**72000**
INORGANIC	Chromium	µg/L	640	810																						
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	**5**		**50**			**5**		**5**			**5**	**50**	**50**	**5**	**5**	**5**	**5**	**50**	**5**	**50**	**5**	**5**
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	**5**		**5**			**5**		**5**			**5**	**5**	**5**	**5**	**5**	**23**	**5**	**5**	**6**	**5**	**5**	**5**
INORGANIC	Cobalt	µg/L	52	66																						
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	**1.2**		**15**			**0.5**		**30**			**60**	**5**	**5**	**1.1**	**4**	**0.72**	**0.5**	**5**	**0.5**	**5**	**0.5**	**0.5**
INORGANIC	Copper	µg/L	69	87																						
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	**1**		**10**			**1**		**1.2**			**1.9**	**10**	**10**	**1**	**1**	**1**	**1**	**10**	**1**	**10**	**1**	**1**
INORGANIC	Cyanide	µg/L	52	66	**2**		**2**			**2**		**2**			**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**9**	**180**	**2**	**2**
INORGANIC	Electrical Conductivity	ms/cm																								
INORGANIC	Lead	µg/L	20	25																						
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	**0.5**		**5**			**0.5**		**0.5**			**0.5**	**5**	**5**	**0.5**	**0.5**	**1.1**	**0.5**	**5**	**0.5**	**5**	**0.5**	**0.5**
INORGANIC	Mercury	µg/L	0.29	0.29	**0.1**		**0.1**			**0.1**		**0.1**			**0.1**	**1.5**	**0.1**	**0.1**	**0.1**	**0.1**	**0.7**	**0.1**	**0.1**	**0.1**	**0.1**	**2.1**
INORGANIC	Molybdenum	µg/L	7300	9200																						
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**1**		**10**			**1.1**		**2.3**			**4.2**	**10**	**10**	**1**	**1**	**1**	**2.1**	**10**	**1**	**10**	**1**	**1**
INORGANIC	Nickel	µg/L	390	490																						
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	**1**		**13**			**1**		**15**			**61**	**10**	**10**	**1.3**	**5.6**	**1**	**1.2**	**10**	**1**	**10**	**1**	**1**
INORGANIC	Selenium	µg/L	50	63																						
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	**2**		**20**			**2**		**2**			**2**	**20**	**20**	**2**	**2**	**2**	**2**	**20**	**2**	**20**	**2**	**2**
INORGANIC	Silver	µg/L	1.2	1.5																						
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	**0.1**		**1**			**0.1**		**0.1**			**0.1**	**1**	**1**	**0.1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**1**	**0.1**	**0.1**
INORGANIC	Sodium	µg/L	1800000	2300000																						
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**320000**		**950000**			**23000**		**260000**			**340000**	**1300000**	**1500000**	**130000**	**46000**	**98000**	**20000**	**280000**	**13000**	**41000**	**100000**	**35000**
INORGANIC	Sodium Absorption Ratio	None																								
INORGANIC	Thallium	µg/L	400	510																						
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	**0.05**		**0.5**			**0.05**		**0.05**			**0.72**	**0.5**	**0.5**	**0.05**	**0.06**	**0.05**	**0.05**	**0.5**	**0.05**	**0.5**	**0.05**	**0.05**
INORGANIC	Uranium (U)	µg/L	330	420																						
INORGANIC	Vanadium	µg/L	200	250																						
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	**1.7**		**10**			**1**		**1.4**			**5**	**10**	**10**	**1**	**1.4**	**1**	**1.1**	**10**	**3.2**	**10**	**1**	**1**
INORGANIC	Zinc	µg/L	890	1100																						
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	**5**		**53**			**11**		**11**			**22**	**50**	**50**	**16**	**5.1**	**5**	**5**	**50**	**5**	**50**	**5**	**5**

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH122	SLR BH122	SLR BH123	SLR BH123	SLR BH123	SLR BH124	SLR BH124	SLR BH125	SLR BH125	SLR BH125	SLR BH127	SLR BH128	SLR BH130	SLR BH136	SLR BH137	SLR BH138	SLR BH139	SLR BH140	SLR BH141	SLR BH142	SLR BH143	SLR BH144
					Sample ID	BH 122	BH 122-030809	BH 123	BH 123-030809	DUP C	BH 124	BH 124-030809	BH 125	BH 125-030809	DUP B-030809	BH127	BH 128	BH 130	BH 136	BH 137	BH 138	BH 139	BH 140	BH 141	BH 142	BH 143	BH 144
					Start Depth (mbgs)																					
					End Depth (mbgs)																					
					Date	28 Dec 2008	08 Mar 2009	28 Dec 2008	08 Mar 2009	08 Mar 2009	28 Dec 2008	08 Mar 2009	29 Dec 2008	08 Mar 2009	08 Mar 2009	10 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	05 Dec 2008	05 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	05 Dec 2008	05 Dec 2008
OCP	Hexachlorobenzene	µg/L	3.1	3.1																						
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																						
OCP	Hexachloroethane	µg/L	94	94																						
other SVOC	2-Chloronaphthalene	µg/L																								
other SVOC	2-Hexanone	µg/L																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																								
other SVOC	4-Chlorophenyl Phenylether	µg/L																								
other SVOC	Bis (2-chloroethoxy) methane	µg/L																								
other SVOC	Butyl benzyl phthalate	µg/L																								
other SVOC	Chloroethane	µg/L																								
other SVOC	Chloromethane	µg/L																								
other SVOC	Di-N-Butylphthalate	µg/L																								
other SVOC	Di-n-octyl phthalate	µg/L																								
other SVOC	Isophorone	µg/L																								
other SVOC	Nitrobenzene	µg/L																								
other SVOC	N-Nitrosodi-N-propylamine	µg/L																								
other SVOC	N-Nitrosodiphenylamine	µg/L																								
other SVOC	Perylene	µg/L																								
PAH	1-Methylnaphthalene	µg/L	1500	1800												**0.05**	**0.1**	**0.16**	**0.09**	**0.05**	**30**	**10**	**14**	**18**	**0.05**	**110**	**1000**
PAH	2-Methylnaphthalene	µg/L	1500	1800												**0.05**	**0.05**	**0.05**	**0.16**	**0.05**	**0.05**	**0.05**	**5.5**	**20**	**0.05**	**49**	**250**
PAH	Acenaphthene	µg/L	600	600												**0.05**	**2.3**	**1.5**	**0.05**	**0.13**	**1.1**	**0.36**	**0.37**	**0.66**	**0.05**	**110**	**350**
PAH	Acenaphthylene	µg/L	1.4	1.8												**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.15**	**0.05**	**2.1**	**40**
PAH	Anthracene	µg/L	1	2.4												**0.05**	**0.17**	**0.14**	**0.05**	**0.05**	**0.18**	**0.05**	**0.11**	**0.5**	**0.05**	**15**	**190**
PAH	Benzo(a)anthracene	µg/L	1.8	4.7												**0.05**	**0.22**	**0.11**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.12**	**0.05**	**4.5**	**130**
PAH	Benzo(a)pyrene	µg/L	0.81	0.81												**0.01**	**0.1**	**0.04**	**0.01**	**0.02**	**0.01**	**0.01**	**0.01**	**0.02**	**0.01**	**2.4**	**63**
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75												**0.05**	**0.15**	**0.06**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**2.3**	**55**
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75																						
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2												**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.91**	**22**
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4												**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.76**	**19**
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																						
PAH	Chrysene	µg/L	0.7	1												**0.05**	**0.17**	**0.09**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**3.2**	**87**
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52												**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.29**	**20**
PAH	Fluoranthene	µg/L	73	130												**0.05**	**0.5**	**0.4**	**0.12**	**0.05**	**0.05**	**0.05**	**0.05**	**0.41**	**0.05**	**12**	**170**
PAH	Fluorene	µg/L	290	400												**0.05**	**0.34**	**0.37**	**0.05**	**0.05**	**1.7**	**0.4**	**0.28**	**1.2**	**0.05**	**30**	**200**
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2												**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.97**	**21**
PAH	Naphthalene	µg/L	1400	1400												**0.05**	**0.13**	**0.15**	**3**	**0.05**	**2.3**	**0.64**	**16**	**130**	**0.05**	**180**	**300**
PAH	Phenanthrene	µg/L	380	580												**0.06**	**0.71**	**0.43**	**0.16**	**0.05**	**0.1**	**0.05**	**0.38**	**2.2**	**0.05**	**48**	**690**
PAH	Pyrene	µg/L	5.7	68												**0.06**	**0.41**	**0.29**	**0.09**	**0.06**	**0.11**	**0.05**	**0.08**	**0.37**	**0.05**	**15**	**270**
PCB	PCB, Total	µg/L	0.2	7.8																						
PHC	F1 (C6-C10)	µg/L	420	750		**100**		**2100**	**3800**		**760**		**550**	**590**		**100**	**100**	**100**	**100**	**100**	**3000**	**2900**	**4300**	**14000**	**100**	**1000**	**940**
PHC	F1-BTEX	µg/L	420	750		**100**		**2000**	**3700**		**490**		**100**	**100**		**100**	**100**	**100**	**100**	**100**	**1600**	**2700**	**4100**	**11000**	**100**	**430**	**550**
PHC	F2 (C10-C16)	µg/L	150	150		**100**		**26000**	**14000**		**4700**		**1100**	**1200**		**100**	**100**	**100**	**100**	**100**	**2200**	**2000**	**930**	**1400**	**100**	**5300**	**30000**
PHC	F3 (C16-C34)	µg/L	500	500		**100**		**6800**	**3900**		**4700**		**550**	**380**		**100**	**100**	**100**	**100**	**100**	**120**	**200**	**100**	**100**	**100**	**660**	**33000**
PHC	F4 (C34-C50)	µg/L	500	500		**100**		**1300**	**640**		**1100**		**100**	**100**		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**6200**
PHC	Chrom. to baseline at nC50	None				Yes		Yes	Yes		Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SVOC	Benzo(e)pyrene	µg/L																								
SVOC	Hexachlorocyclopentadiene	µg/L																								
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	1,1,1-Trichloroethane	µg/L	640	640	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	1,1-Dichloroethane	µg/L	320	320	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	**30**		**6**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**20**
VOC	1,2-Dichloroethene (Total)	µg/L																								
VOC	1,2-Dichloropropane	µg/L	16	16	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	1,3-Dichloropropene	µg/L	5.2	5.2																						
VOC	1,4-Dichlorobenzene	µg/L	8	8	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	2-Butanone	µg/L	470000	470000	**500**		**130**			**5**		**500**				**10**	**20**	**13**	**25**	**13**	**1300**	**100**	**130**	**500**	**13**	**500**	**250**
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	**500**		**130**			**5**		**500**				**10**	**20**	**13**	**25**	**13**	**1300**	**100**	**130**	**500**	**13**	**500**	**250**
VOC	Acetone	µg/L	100000	130000	**1000**		**250**			**10**		**1000**				**20**	**40**	**25**	**50**	**25**	**2500**	**200**	**250**	**1000**	**25**	**1000**	**500**
VOC	Benzene	µg/L	44	44	**620**	**0.2**	**120**	**88**	**85**	**0.1**	**250**	**270**	**110**	**130**		**1.7**	**0.4**	**0.25**	**14**	**0.25**	**1500**	**45**	**2.5**	**210**	**0.34**	**410**	**350**
VOC	Bromodichloromethane	µg/L	67000	85000	**10**		**2.5**			**0.16**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	Bromoform	µg/L	380	380	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	Bromomethane	µg/L	5.6	5.6	**50**		**13**			**0.5**		**50**				**1**	**2**	**1.3**	**2.5**	**1.3**	**130**	**10**	**13**	**50**	**1.3**	**50**	**25**
VOC	Carbon tetrachloride	µg/L	0.79	0.79	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	Chlorobenzene	µg/L	500	630	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	Chlorodibromomethane	µg/L	65000	82000	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	Chloroform	µg/L	2.4	2.4	**10**		**2.5**			**1.8**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	**10**		**2.5**			**0.1**		**10**				**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	**20**		**5**			**0.2**		**20**				**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH122	SLR BH122	SLR BH123	SLR BH123	SLR BH123	SLR BH124	SLR BH124	SLR BH125	SLR BH125	SLR BH125	SLR BH127	SLR BH128	SLR BH130	SLR BH136	SLR BH137	SLR BH138	SLR BH139	SLR BH140	SLR BH141	SLR BH142	SLR BH143	SLR BH144
					Sample ID	BH 122	BH 122-030809	BH 123	BH 123-030809	DUP C	BH 124	BH 124-030809	BH 125	BH 125-030809	DUP B-030809	BH127	BH 128	BH 130	BH 136	BH 137	BH 138	BH 139	BH 140	BH 141	BH 142	BH 143	BH 144
					Start Depth (mbgs)																					
					End Depth (mbgs)																					
					Date	28 Dec 2008	08 Mar 2009	28 Dec 2008	08 Mar 2009	08 Mar 2009	28 Dec 2008	08 Mar 2009	29 Dec 2008	08 Mar 2009	08 Mar 2009	10 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	18 Dec 2008	05 Dec 2008	05 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	05 Dec 2008	05 Dec 2008
VOC	Dichlorodifluoromethane	µg/L	3500	4400																						
VOC	Dichloromethane	µg/L	610	610	**50**		**13**			**0.5**		**640**			**1**	**2**	**1.3**	**2.5**	**1.3**	**130**	**10**	**13**	**50**	**1.3**	**50**	**25**
VOC	Ethylbenzene	µg/L	1800	2300	**190**	**0.2**	**4.7**	**0.2**	**2**	**0.1**	**14**	**570**	**28**	**15**	**0.2**	**0.4**	**0.25**	**21**	**0.25**	**25**	**42**	**21**	**820**	**0.25**	**180**	**39**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	**20**		**5**			**0.2**		**20**			**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	n-Hexane	µg/L	51	51																						
VOC	Styrene	µg/L	1300	1300	**20**		**5**			**0.2**		**20**			**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	Tetrachloroethene	µg/L	1.6	1.6	**10**		**2.5**			**0.1**		**10**			**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**1.6**	**10**	**5**
VOC	Toluene	µg/L	14000	18000	**20**	**0.2**	**5.9**	**2.9**	**3.1**	**0.5**	**1.2**	**20**	**7**	**7.9**	**0.52**	**0.8**	**0.5**	**13**	**0.5**	**50**	**14**	**5**	**120**	**0.5**	**20**	**10**
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	**10**		**2.5**			**0.1**		**10**			**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	**20**		**5**			**0.2**		**20**			**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	Trichloroethylene	µg/L	1.6	1.6	**10**		**2.5**			**0.34**		**10**			**0.2**	**0.4**	**0.25**	**0.5**	**0.25**	**25**	**2**	**2.5**	**10**	**0.25**	**10**	**5**
VOC	Trichlorofluoromethane	µg/L	2000	2500																						
VOC	Vinyl Chloride	µg/L	0.5	0.5	**20**		**5**			**0.2**		**20**			**0.4**	**0.8**	**0.5**	**1**	**0.5**	**50**	**4**	**5**	**20**	**0.5**	**20**	**10**
VOC	Xylene, o	µg/L	3300	4200	**11**	**0.2**	**2.5**	**1.1**	**2**	**0.1**	**4.5**	**250**	**140**	**140**	**0.2**	**0.4**	**0.25**	**5.2**	**0.25**	**25**	**21**	**22**	**97**	**0.25**	**26**	**8.2**
VOC	Xylenes, m & p	µg/L	3300	4200	**16**	**0.4**	**2.5**	**0.65**	**4**	**0.1**	**3.9**	**400**	**200**	**200**	**0.2**	**0.4**	**0.25**	**15**	**0.27**	**25**	**83**	**130**	**3200**	**0.4**	**20**	**11**
VOC	Xylenes, Total	µg/L	3300	4200	**27**	**0.4**	**2.5**	**1.7**	**4**	**0.1**	**8.4**	**660**	**340**	**340**	**0.2**	**0.4**	**0.25**	**20**	**0.27**	**25**	**100**	**150**	**3300**	**0.4**	**46**	**19**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**SLR BH145**	**SLR BH146**	**SLR BH147**	**SLR BH148**	**SLR BH149**	**SLR BH150**	**SLR BH151**	**SLR BH152**	**SLR BH153**	**SLR BH154**	**SLR BH155**	**SLR BH156**	**SLR BH157**	**SLR BH158**	**SLR BH161**	**SLR BH162**	**SLR BH165**	**SLR BH167**	**SLR BH168**	**SLR BH170**	**SLR BH172**	**Terrapex MW101**
					Sample ID	BH 145	BH 146	BH 147	BH 148	BH 149	BH 150	BH 151	BH 152	BH 153	BH 154	BH 155	BH 156	BH 157	BH158	BH161	BH162	BH165	BH167	BH 168	BH 170	BH172	MW101
					Start Depth (mbgs)																					3.1
					End Depth (mbgs)																					9.1
					Date	05 Dec 2008	04 Dec 2008	11 Dec 2008	04 Dec 2008	05 Dec 2008	19 Dec 2008	30 Dec 2008	11 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	30 Dec 2008	11 Dec 2008	13 Dec 2008	13 Dec 2008	13 Dec 2008	10 Dec 2008	10 Dec 2008	11 Dec 2008	11 Dec 2008	12 Dec 2008	19 Oct 2004
Type	**Analyte**	**Unit**	**Table 9 Standards**	**Table 3 Standards**																						
ABN	1,2,4-Trichlorobenzene	µg/L	180	180																						
ABN	2,4-Dimethylphenol	µg/L	31000	39000																						
ABN	2,4-Dinitrophenol	µg/L	9000	11000																						
ABN	2,4-Dinitrotoluene	µg/L	2300	2900																						
ABN	2,6-Dinitrotoluene	µg/L	2300	2900																						
ABN	2-Chlorophenol	µg/L	2600	3300																						
ABN	3,3`-Dichlorobenzidine	µg/L	500	640																						
ABN	4-Chloroaniline	µg/L	320	400																						
ABN	Bis (2-chloroethyl) ether	µg/L	240000	300000																						
ABN	bis (2-Chloroisopropyl) ether	µg/L	20000	20000																						
ABN	Bis (2-ethylhexyl) phthalate	µg/L	30	140																						
ABN	Diethylphthalate	µg/L	30	38																						
ABN	Dimethylphthalate	µg/L	30	38																						
ABN	Phenol	µg/L	9600	12000																						
BIOLOGICAL	Fecal coliform	µg/L																								
CHEMISTRY	Biochemical Oxygen Demand	µg/L																								
CHEMISTRY	Lab pH	pH UNITS																								
CHEMISTRY	Moisture, percent	%																								
CHEMISTRY	Nitrate (as N)	µg/L																								
Chemistry	Nitrate as N	µg/L			**100**	**110**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**3400**	**100**	**100**	
CHEMISTRY	Nitrate-Nitrite (as N)	µg/L			**100**	**110**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**3450**	**100**	**100**	
CHEMISTRY	Nitrite (as N)	µg/L			**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**55**	**10**	**10**	
CHEMISTRY	Total Suspended Solids	µg/L																								
CP	2,4,5-Trichlorophenol	µg/L	1300	1600																						
CP	2,4,6-Trichlorophenol	µg/L	180	230																						
CP	2,4-Dichlorophenol	µg/L	3700	4600																						
CP	Pentachlorophenol	µg/L	50	62																						
INORGANIC	Antimony	µg/L	16000	20000																						0.005 U
INORGANIC	Antimony (Sb)-Dissolved	µg/L	16000	20000	**1.6**	**5**	**0.5**	**0.5**	**0.5**	**5**	**0.5**	**0.81**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.79**	**0.5**	**0.5**	**0.5**	**0.5**	**0.51**	**0.5**	**0.5**	
INORGANIC	Arsenic	µg/L	1500	1900																						0.5 U
INORGANIC	Arsenic (As)-Dissolved	µg/L	1500	1900	**50**	**10**	**2.1**	**1.8**	**4.3**	**10**	**1**	**1**	**1.2**	**1.8**	**1.8**	**1**	**1.4**	**1.7**	**2.5**	**1.6**	**2.3**	**4.6**	**1.5**	**3.7**	**8.5**	
INORGANIC	Barium	µg/L	23000	29000																						0.5 U
INORGANIC	Barium (Ba)-Dissolved	µg/L	23000	29000	**200**	**79**	**180**	**200**	**250**	**98**	**93**	**130**	**170**	**430**	**220**	**220**	**360**	**140**	**290**	**200**	**190**	**140**	**73**	**160**	**640**	
INORGANIC	Beryllium	µg/L	53	67																						**8.99**
INORGANIC	Beryllium (Be)-Dissolved	µg/L	53	67	**0.5**	**5**	**0.5**	**0.5**	**0.5**	**5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	
INORGANIC	Boron	µg/L	36000	45000																						**11**
INORGANIC	Boron (B)-Dissolved	µg/L	36000	45000	**34**	**150**	**110**	**270**	**100**	**480**	**79**	**97**	**170**	**300**	**170**	**110**	**180**	**280**	**630**	**1800**	**360**	**4700**	**3600**	**20000**	**1100**	
INORGANIC	Cadmium	µg/L	2.1	2.7																						**23**
INORGANIC	Cadmium (Cd)-Dissolved	µg/L	2.1	2.7	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.11**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	
INORGANIC	Chloride (Cl)	µg/L	1800000	2300000	**160000**	**51000**	**28000**	**22000**	**150000**	**830000**	**49000**	**110000**	**17000**	**46000**	**55000**	**120000**	**50000**	**100000**	**200000**	**79000**	**16000**	**120000**	**23000**	**39000**	**180000**	**9.99**
INORGANIC	Chromium	µg/L	640	810																						0.5 U
INORGANIC	Chromium (Cr)-Dissolved	µg/L	640	810	**5**	**50**	**5**	**5**	**5**	**50**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	
INORGANIC	Chromium, Hexavalent (Cr6+)	µg/L	110	140	**5**	**7**	**7**	**9**	**10**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**7**	
INORGANIC	Cobalt	µg/L	52	66																						**0.5**
INORGANIC	Cobalt (Co)-Dissolved	µg/L	52	66	**5.2**	**5**	**0.89**	**0.54**	**0.5**	**5**	**0.5**	**3.3**	**1.3**	**1.6**	**1.3**	**0.5**	**0.56**	**8**	**1.9**	**9.6**	**2.3**	**0.57**	**2.6**	**6.9**	**0.99**	
INORGANIC	Copper	µg/L	69	87																						**7.4**
INORGANIC	Copper (Cu)-Dissolved	µg/L	69	87	**1.5**	**10**	**1**	**1**	**1**	**10**	**1**	**1.7**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1.4**	**1.3**	**1**	
INORGANIC	Cyanide	µg/L	52	66	**2**	**20**	**2**	**2**	**2**	**9**	**2**	**2**	**10**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	
INORGANIC	Electrical Conductivity	ms/cm																								
INORGANIC	Lead	µg/L	20	25																						0.5 U
INORGANIC	Lead (Pb)-Dissolved	µg/L	20	25	**0.5**	**5**	**0.5**	**0.5**	**0.5**	**5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	
INORGANIC	Mercury	µg/L	0.29	0.29	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	
INORGANIC	Molybdenum	µg/L	7300	9200																						0.09 U
INORGANIC	Molybdenum (Mo)-Dissolved	µg/L	7300	9200	**1.1**	**10**	**1**	**1**	**1**	**10**	**1**	**1.1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1.2**	**1**	**1**	**4**	**1**	**1**	
INORGANIC	Nickel	µg/L	390	490																						**11**
INORGANIC	Nickel (Ni)-Dissolved	µg/L	390	490	**5.8**	**10**	**1**	**1**	**1**	**10**	**1**	**3.9**	**1**	**1.1**	**1**	**1**	**5**	**7.1**	**3.3**	**9.5**	**2.5**	**1.8**	**5**	**12**	**1.3**	
INORGANIC	Selenium	µg/L	50	63																						**8**
INORGANIC	Selenium (Se)-Dissolved	µg/L	50	63	**2**	**20**	**2**	**2**	**2**	**20**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	
INORGANIC	Silver	µg/L	1.2	1.5																						**4**
INORGANIC	Silver (Ag)-Dissolved	µg/L	1.2	1.5	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	
INORGANIC	Sodium	µg/L	1800000	2300000																						**3**
INORGANIC	Sodium (Na)-Dissolved	µg/L	1800000	2300000	**84000**	**30000**	**20000**	**18000**	**160000**	**910000**	**47000**	**85000**	**18000**	**93000**	**23000**	**67000**	**25000**	**70000**	**200000**	**150000**	**21000**	**170000**	**23000**	**110000**	**110000**	
INORGANIC	Sodium Absorption Ratio	None																								
INORGANIC	Thallium	µg/L	400	510																						**51.1**
INORGANIC	Thallium (Tl)-Dissolved	µg/L	400	510	**0.05**	**0.5**	**0.05**	**0.05**	**0.05**	**0.5**	**0.05**	**0.09**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.35**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	
INORGANIC	Uranium (U)	µg/L	330	420																						**14**
INORGANIC	Vanadium	µg/L	200	250																						**2**
INORGANIC	Vanadium (V)-Dissolved	µg/L	200	250	**3.3**	**10**	**1.9**	**1**	**2.8**	**10**	**3.6**	**1**	**1**	**1**	**1**	**1.3**	**2.8**	**3.2**	**2.1**	**2.6**	**1**	**2.6**	**1.1**	**3.7**	**2.1**	
INORGANIC	Zinc	µg/L	890	1100																						**8.99**
INORGANIC	Zinc (Zn)-Dissolved	µg/L	890	1100	**17**	**50**	**5.4**	**5**	**7.6**	**50**	**5**	**9.4**	**8.5**	**5**	**9**	**5**	**5**	**18**	**5**	**5**	**7.2**	**5**	**5**	**25**	**5**	

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	SLR BH145	SLR BH146	SLR BH147	SLR BH148	SLR BH149	SLR BH150	SLR BH151	SLR BH152	SLR BH153	SLR BH154	SLR BH155	SLR BH156	SLR BH157	SLR BH158	SLR BH161	SLR BH162	SLR BH165	SLR BH167	SLR BH168	SLR BH170	SLR BH172	Terrapex MW101
					Sample ID	BH 145	BH 146	BH 147	BH 148	BH 149	BH 150	BH 151	BH 152	BH 153	BH 154	BH 155	BH 156	BH 157	BH158	BH161	BH162	BH165	BH167	BH 168	BH 170	BH172	MW101
					Start Depth (mbgs)																						3.1
					End Depth (mbgs)																						9.1
					Date	05 Dec 2008	04 Dec 2008	11 Dec 2008	04 Dec 2008	05 Dec 2008	19 Dec 2008	30 Dec 2008	11 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	30 Dec 2008	11 Dec 2008	13 Dec 2008	13 Dec 2008	13 Dec 2008	10 Dec 2008	10 Dec 2008	11 Dec 2008	11 Dec 2008	12 Dec 2008	19 Oct 2004
OCP	Hexachlorobenzene	µg/L	3.1	3.1																						
OCP	Hexachlorobutadiene	µg/L	0.44	0.44																						
OCP	Hexachloroethane	µg/L	94	94																						
other SVOC	2-Chloronaphthalene	µg/L																								
other SVOC	2-Hexanone	µg/L																								
other SVOC	4-Bromophenyl Phenyl Ether	µg/L																								
other SVOC	4-Chlorophenyl Phenylether	µg/L																								
other SVOC	Bis (2-chloroethoxy) methane	µg/L																								
other SVOC	Butyl benzyl phthalate	µg/L																								
other SVOC	Chloroethane	µg/L																								
other SVOC	Chloromethane	µg/L																								
other SVOC	Di-N-Butylphthalate	µg/L																								
other SVOC	Di-n-octyl phthalate	µg/L																								
other SVOC	Isophorone	µg/L																								
other SVOC	Nitrobenzene	µg/L																								
other SVOC	N-Nitrosodi-N-propylamine	µg/L																								
other SVOC	N-Nitrosodiphenylamine	µg/L																								
other SVOC	Perylene	µg/L																								
PAH	1-Methylnaphthalene	µg/L	1500	1800	**0.59**	**0.83**	**20**	**96**	**8.1**	**130**	**0.35**	**0.05**	**0.49**	**7.2**	**0.05**	**0.05**	**14**	**0.05**	**0.05**	**0.05**	**0.05**	**0.07**	**1.1**	**0.06**	**2.6**	0.09 U
PAH	2-Methylnaphthalene	µg/L	1500	1800	**0.27**	**0.5**	**0.18**	**0.21**	**0.19**	**180**	**0.05**	**0.05**	**0.29**	**0.05**	**0.05**	**0.05**	**0.29**	**0.05**	**0.05**	**0.05**	**0.05**	**0.06**	**0.11**	**0.05**	**0.44**	0.09 U
PAH	Acenaphthene	µg/L	600	600	**0.14**	**2.6**	**1.3**	**1.5**	**1.2**	**4.2**	**0.38**	**0.05**	**0.23**	**1.1**	**0.37**	**0.05**	**1.8**	**0.05**	**0.08**	**0.05**	**0.07**	**0.05**	**0.62**	**0.06**	**0.77**	1.49 U
PAH	Acenaphthylene	µg/L	1.4	1.8	**0.05**	**0.79**	**0.12**	**0.25**	**0.12**	**1.1**	**0.5**	**0.05**	**0.05**	**0.12**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.11**	1.49 U
PAH	Anthracene	µg/L	1	2.4	**0.05**	**2.1**	**0.29**	**0.14**	**0.16**	**2.2**	**0.09**	**0.05**	**0.05**	**0.07**	**0.05**	**0.06**	**0.46**	**0.05**	**0.06**	**0.05**	**0.06**	**0.08**	**0.29**	**0.25**	**0.19**	0.33 U
PAH	Benzo(a)anthracene	µg/L	1.8	4.7	**0.05**	**2.2**	**0.05**	**0.12**	**0.18**	**0.67**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.21**	**0.05**	**0.05**	**0.05**	**0.07**	**0.28**	**0.2**	**0.05**	**0.36**	**24**
PAH	Benzo(a)pyrene	µg/L	0.81	0.81	**0.02**	**1**	**0.01**	**0.03**	**0.13**	**0.32**	**0.05**	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.11**	**0.01**	**0.03**	**0.01**	**0.05**	**0.2**	**0.17**	**0.03**	**0.24**	**28**
PAH	Benzo(b&j)fluoranthene	µg/L	0.75	0.75	**0.05**	**0.83**	**0.05**	**0.06**	**0.2**	**0.36**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.11**	**0.05**	**0.05**	**0.05**	**0.06**	**0.29**	**0.14**	**0.05**	**0.33**	
PAH	Benzo(b)fluoranthene	µg/L	0.75	0.75																						**16**
PAH	Benzo(g,h,i)perylene	µg/L	0.2	0.2	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.23**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.11**	**0.1**	**0.1**	**0.1**	**0.1**	**0.16**	**0.39**	**0.1**	**0.26**	**16**
PAH	Benzo(k)fluoranthene	µg/L	0.4	0.4	**0.05**	**0.5**	**0.05**	**0.05**	**0.06**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.09**	**0.05**	**0.05**	**0.13**	**6**
PAH	Benzo[j]fluoranthene	µg/L	0.75	0.75																						
PAH	Chrysene	µg/L	0.7	1	**0.05**	**1.7**	**0.05**	**0.08**	**0.17**	**0.74**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.14**	**0.05**	**0.05**	**0.05**	**0.06**	**0.2**	**0.11**	**0.05**	**0.31**	0.5 U
PAH	Dibenzo(a,h)anthracene	µg/L	0.4	0.52	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**1.88**
PAH	Fluoranthene	µg/L	73	130	**0.05**	**2.9**	**0.24**	**0.14**	**0.41**	**0.94**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.17**	**0.25**	**0.05**	**0.17**	**0.05**	**0.13**	**0.39**	**0.21**	**0.06**	**0.61**	0.5 U
PAH	Fluorene	µg/L	290	400	**0.05**	**3.2**	**0.91**	**1.4**	**0.69**	**8.6**	**0.05**	**0.05**	**0.05**	**1**	**0.12**	**0.06**	**3.5**	**0.05**	**0.11**	**0.05**	**0.05**	**0.05**	**0.83**	**0.05**	**0.69**	0.5 U
PAH	Indeno(1,2,3-Cd)Pyrene	µg/L	0.2	0.2	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.13**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.16**	**0.11**	**0.1**	**0.21**	0.5 U
PAH	Naphthalene	µg/L	1400	1400	**0.46**	**1.8**	**1.7**	**0.64**	**3.2**	**110**	**0.21**	**0.05**	**2**	**0.38**	**0.05**	**0.05**	**0.88**	**0.09**	**0.05**	**0.05**	**0.07**	**0.11**	**0.18**	**0.08**	**0.58**	0.09 U
PAH	Phenanthrene	µg/L	380	580	**0.06**	**1.1**	**0.71**	**0.28**	**0.1**	**15**	**0.05**	**0.05**	**0.05**	**0.18**	**0.05**	**0.24**	**0.41**	**0.05**	**0.24**	**0.05**	**0.15**	**0.25**	**0.49**	**0.1**	**0.68**	**4**
PAH	Pyrene	µg/L	5.7	68	**0.09**	**5.4**	**0.28**	**0.16**	**0.45**	**3.2**	**0.25**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.41**	**0.05**	**0.13**	**0.05**	**0.16**	**0.35**	**0.36**	**0.1**	**0.66**	**8.99**
PCB	PCB, Total	µg/L	0.2	7.8																						**142**
PHC	F1 (C6-C10)	µg/L	420	750	**100**	**1400**	**2900**	**1500**	**5000**	**5000**	**2400**	**100**	**100**	**100**	**100**	**100**	**110**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**240**	**106**
PHC	F1-BTEX	µg/L	420	750	**100**	**940**	**2400**	**1200**	**3700**	**4000**	**2200**	**100**	**100**	**100**	**100**	**100**	**110**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
PHC	F2 (C10-C16)	µg/L	150	150	**110**	**3300**	**970**	**1700**	**1700**	**12000**	**1700**	**100**	**100**	**220**	**100**	**100**	**520**	**100**	**100**	**100**	**100**	**100**	**190**	**100**	**190**	
PHC	F3 (C16-C34)	µg/L	500	500	**100**	**6200**	**100**	**100**	**260**	**8400**	**100**	**100**	**100**	**100**	**100**	**100**	**300**	**100**	**100**	**100**	**100**	**100**	**220**	**530**	**100**	106 U
PHC	F4 (C34-C50)	µg/L	500	500	**100**	**2100**	**100**	**100**	**100**	**2500**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**350**	**100**	
PHC	Chrom. to baseline at nC50	None			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes			Yes	Yes	
SVOC	Benzo(e)pyrene	µg/L																								
SVOC	Hexachlorocyclopentadiene	µg/L																								
VOC	1,1,1,2-Tetrachloroethane	µg/L	3.3	3.3	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.3 U
VOC	1,1,1-Trichloroethane	µg/L	640	640	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.3 U
VOC	1,1,2,2-Tetrachloroethane	µg/L	3.2	3.2	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.19 U
VOC	1,1,2-Trichloroethane	µg/L	4.7	4.7	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.002 U
VOC	1,1-Dichloroethane	µg/L	320	320	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.6 U
VOC	1,1-Dichloroethene	µg/L	1.6	1.6	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.5 U
VOC	1,2-Dibromoethane	µg/L	0.25	0.25	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.5 U
VOC	1,2-Dichlorobenzene	µg/L	4600	4600	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.19 U
VOC	1,2-Dichloroethane	µg/L	1.6	1.6	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**10**	0.19 U
VOC	1,2-Dichloroethene (Total)	µg/L																								
VOC	1,2-Dichloropropane	µg/L	16	16	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.002 U
VOC	1,3-Dichlorobenzene	µg/L	7600	9600	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.002 U
VOC	1,3-Dichloropropene	µg/L	5.2	5.2																						0.002 U
VOC	1,4-Dichlorobenzene	µg/L	8	8	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	0.002 U
VOC	2-Butanone	µg/L	470000	470000	**25**	**500**	**250**	**130**	**500**	**500**	**100**	**5**	**25**	**25**	**25**	**25**	**25**	**5**	**50**	**5**	**20**	**10**	**5**	**13**	**130**	2.49 U
VOC	4-Methyl-2-Pentanone	µg/L	140000	140000	**25**	**500**	**250**	**130**	**500**	**500**	**100**	**5**	**25**	**25**	**25**	**25**	**25**	**5**	**50**	**5**	**20**	**10**	**5**	**13**	**130**	1.3 U
VOC	Acetone	µg/L	100000	130000	**50**	**1000**	**500**	**250**	**1000**	**1000**	**200**	**10**	**50**	**50**	**50**	**50**	**50**	**10**	**100**	**10**	**40**	**20**	**10**	**25**	**250**	0.31 U
VOC	Benzene	µg/L	44	44	**8.8**	**410**	**420**	**82**	**230**	**31**	**9**	**0.1**	**0.5**	**0.5**	**0.58**	**0.5**	**7.8**	**1.4**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**230**	0.5 U
VOC	Bromodichloromethane	µg/L	67000	85000	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**12**
VOC	Bromoform	µg/L	380	380	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	**11**
VOC	Bromomethane	µg/L	5.6	5.6	**2.5**	**50**	**25**	**13**	**50**	**50**	**10**	**0.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**0.5**	**5**	**0.5**	**2**	**1**	**0.5**	**1.3**	**13**	**24**
VOC	Carbon tetrachloride	µg/L	0.79	0.79	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**27**
VOC	Chlorobenzene	µg/L	500	630	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**25**
VOC	Chlorodibromomethane	µg/L	65000	82000	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	**0.5**
VOC	Chloroform	µg/L	2.4	2.4	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.005 U
VOC	cis-1,2-Dichloroethene	µg/L	1.6	1.6	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.91**	**0.5**	**2.8**	**0.5**	**0.5**	**0.26**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	0.5 U
VOC	cis-1,3-Dichloropropene	µg/L	5.2	5.2	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	

Appendix A2-2. Summary of Historical Groundwater Analytical Results

Port Lands, Toronto, ON

					Location	**SLR BH145**	**SLR BH146**	**SLR BH147**	**SLR BH148**	**SLR BH149**	**SLR BH150**	**SLR BH151**	**SLR BH152**	**SLR BH153**	**SLR BH154**	**SLR BH155**	**SLR BH156**	**SLR BH157**	**SLR BH158**	**SLR BH161**	**SLR BH162**	**SLR BH165**	**SLR BH167**	**SLR BH168**	**SLR BH170**	**SLR BH172**	**Terrapex MW101**
					Sample ID	BH 145	BH 146	BH 147	BH 148	BH 149	BH 150	BH 151	BH 152	BH 153	BH 154	BH 155	BH 156	BH 157	BH158	BH161	BH162	BH165	BH167	BH 168	BH 170	BH172	MW101
					Start Depth (mbgs)																					3.1
					End Depth (mbgs)																						9.1
					Date	05 Dec 2008	04 Dec 2008	11 Dec 2008	04 Dec 2008	05 Dec 2008	19 Dec 2008	30 Dec 2008	11 Dec 2008	04 Dec 2008	04 Dec 2008	04 Dec 2008	30 Dec 2008	11 Dec 2008	13 Dec 2008	13 Dec 2008	13 Dec 2008	10 Dec 2008	10 Dec 2008	11 Dec 2008	11 Dec 2008	12 Dec 2008	19 Oct 2004
VOC	Dichlorodifluoromethane	µg/L	3500	4400																						
VOC	Dichloromethane	µg/L	610	610	**2.5**	**50**	**25**	**13**	**50**	**50**	**120**	**0.5**	**2.5**	**2.5**	**2.5**	**13**	**2.5**	**0.5**	**5**	**0.5**	**2**	**1**	**0.5**	**1.3**	**13**	0.09 U
VOC	Ethylbenzene	µg/L	1800	2300	**1.4**	**60**	**66**	**190**	**410**	**130**	**140**	**0.1**	**0.62**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**0.76**
VOC	Methyl tert-butyl ether (MTBE)	µg/L	190	190	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**12**	0.09 U
VOC	n-Hexane	µg/L	51	51																						
VOC	Styrene	µg/L	1300	1300	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	**106**
VOC	Tetrachloroethene	µg/L	1.6	1.6	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**1.4**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**107**
VOC	Toluene	µg/L	14000	18000	**1.6**	**20**	**14**	**6.8**	**180**	**28**	**12**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	**0.002**
VOC	trans-1,2-Dichloroethene	µg/L	1.6	1.6	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**321**
VOC	trans-1,3-Dichloropropene	µg/L	5.2	5.2	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	
VOC	Trichloroethylene	µg/L	1.6	1.6	**0.5**	**10**	**5**	**2.5**	**10**	**10**	**2**	**0.1**	**0.5**	**0.5**	**0.52**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	**100**
VOC	Trichlorofluoromethane	µg/L	2000	2500																						**106**
VOC	Vinyl Chloride	µg/L	0.5	0.5	**1**	**20**	**10**	**5**	**20**	**20**	**4**	**0.2**	**1**	**1**	**1.5**	**1**	**1**	**0.2**	**2**	**0.2**	**0.8**	**0.4**	**0.2**	**0.5**	**5**	**8.99**
VOC	Xylene, o	µg/L	3300	4200	**0.65**	**10**	**17**	**3.9**	**110**	**56**	**16**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.1**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**2.5**	
VOC	Xylenes, m & p	µg/L	3300	4200	**3.2**	**11**	**15**	**17**	**720**	**600**	**15**	**0.1**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.11**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**3.2**	
VOC	Xylenes, Total	µg/L	3300	4200	**3.9**	**11**	**31**	**20**	**830**	**660**	**31**	**0.1**	**0.7**	**0.5**	**0.5**	**0.5**	**0.5**	**0.11**	**1**	**0.1**	**0.4**	**0.2**	**0.1**	**0.25**	**3.2**	**57**

Notes:

Bold indicates the analyte was detected

Shading indicates the result exceeded Table 9 Standards

Shading indicates the result exceeded Table 3 Standards

[a] Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, Residential/Parkland/Institutional Property Use, Coarse Textured Soils. Table 9: Generic Site Condition Standards for Use within 30 m of a Water Body in a Non-Potable Groundwater Con

Blank cells indicate parameter was not analyzed, or data was not considered (i.e. VOCs/PHC data prior to 2004)

Start and end depth refer to the screened interval of the monitoring well

µg/L – microgram per litre

mbgs – metre below ground surface

mS/cm – milliSiemens per centimetre

NA – No Screening Level Available

PAH - polycyclic aromatic hydrocarbon

PHC - Petroleum Hydrocarbon

U – The analyte was analyzed for, but was not detected bove the reported sample quantitation limit.

VOC - volatile organic compound