Phase II ESA

Richmond Landing, Ottawa, ON
(Property Asset #96189)

Prepared For:
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Executive Summary

Trow Associates Inc. (Trow) was retained by the National Capital Commission (NCC), under Standing Offer Agreement # 543281 to conduct a Phase II Environmental Site Assessment (ESA) at the above-noted location hereinafter referred to as the 'site'. The monitoring program was completed in accordance with the scope of work as defined in the NCC Terms of Reference dated November 3, 2008 and Trow's proposal of November 17, 2008.

The objectives of this project were to establish an environmental baseline of the site conditions and to provide remedial and risk management options to satisfy both federal and provincial criteria for the existing land use (i.e., parkland).

The scope of work for the current program involved drilling twenty five boreholes, all of which were converted into monitoring wells except for BH09-16 and BH09-17. MW09-1 to MW09-15 were drilled from January 6th to January 13th, 2009 and MW09-16 to MW09-25 were drilled from February 23rd to February 26th, 2009. In addition, groundwater samples were collected from the 23 monitoring wells and submitted for analysis of the following contaminants of potential concern (COPC): metals, petroleum hydrocarbons (PHC), volatile organic compounds (VOC), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB). A near surface soil sample, a surface soil sample and a worst case sub-surface soil sample from each borehole was submitted to the laboratory for analysis of the COPC listed above.

The Canadian Council of Ministers of the Environment (CCME) *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (revised 2008) for residential/park land use with coarse-textured soil were used as the primary guideline to compare analytical data. The CCME Canada-Wide Standards (CWS) for Petroleum Hydrocarbons (PHC) in Soil (2008) were used to compare the PHC results in the submitted soil samples. In addition to the CCME federal criteria, the soil results were compared to the Ontario Ministry of Environment (MOE) Table 3 standards for residential/parkland property use in a non-potable ground water setting. Since all of the wells are located within 30 m of the river, the soil results were also compared to MOE Table 1 background concentrations. With respect to groundwater, there are no CCME criteria for non-potable situations, such as this case. For illustrative purposes, the groundwater analytical results from all monitoring wells were compared to the MOE Table 3 (non-potable groundwater) and MOE Table 1 (background concentrations) standards.

The following are the significant conclusions resulting from the Phase II ESA, recommendations are provided in italics:

- Trow drilled twenty-five boreholes at the site, twenty-three of which were converted into monitoring wells (MW09-1 to MW09-25) except for BH09-16 and BH09-17.
- Evidence of waste in the form of wood, glass, coal, brick, mortar and various other fragments was observed in most boreholes. The waste material was found at all levels of the fill material at the site, except near the ground surface. The above-noted waste material only extended to a depth of 0.6 m in the vicinity of the proposed monument.

- On March 5, 2009, the depth to water measured in the monitoring wells ranged from approximately 2.19 to 8.81 mbgs. The monitoring well with the greatest depth to water (MW09-18) is located on the western edge of the site adjacent to the Portage Bridge where the ground surface is significantly higher than the east part of the site.
- There were only three surface soil (0.0 to 0.6 m) samples (MW09-3, MW09-11 and MW09-22) that exceeded the CCME metals and/or PHC soil quality guidelines. None of these locations are in the area of the proposed monument. There were no CCME exceedences of VOC, PAH or PCB parameters in the surface soil samples.
- There was one surface soil sample from the proposed location of the monument (MW09-14 SS1) that had exceedences of MOE Table 3 and MOE Table 1 background concentrations. In addition, a subsurface soil sample exceeded the MOE Table 1 standard for molybdenum at the location of the proposed monument at a depth of 1.5 to 2.1 m. *Therefore, the soil that is excavated from the monument area can be re-used on the site, however it will have to be covered with at least 0.3 m of clean soil.*
- There were several soil samples collected at depth that exceeded the CCME metals and/or PHC soil quality guidelines. Only one sample (MW09-6 SS2) had concentrations of PAH parameters that exceeded the CCME soil quality guidelines. The majority of the site, excluding the eastern part of the site where the monument is proposed, is impacted with at least one of either PHC, PAH or metals parameters that exceed the CCME soil quality guidelines.
- No shallow surface soil (i.e., less than 0.1 m) exceedences of the CCME parkland guidelines or MOE Table 1 background soil concentrations were measured. Therefore, there is a barrier between the human users of the site and the deeper impacted soil measured at the site. *However, Trow recommends that a preliminary quantitative risk assessment (PQRA) be performed to determine the most appropriate risk management measures to address the potential risks to both on-site and off-site human and ecological receptors from the impacted soil located deeper than 0.1 m. Trow recommends the completion of a PQRA at the site at a cost of approximately $25,000.*
- There were no exceedences of the MOE Table 3 groundwater quality standards for PCB, VOC, or BTEX parameters in any of the water samples collected at the site. The modified PHC concentrations measured in samples collected from MW09-11 and MW09-22 exceeded the Atlantic RBCA modified PHC criterion. These two monitoring wells are located on the south and north edges, respectively, in the central part of the site and are in close proximity to a former above ground bulk fuel storage tank location.
- There was visual and olfactory evidence of petroleum hydrocarbon impact (i.e., sheen and odour) detected in the groundwater from MW09-4, MW09-6, MW09-7, MW09-10, MW09-11, MW09-18, MW09-20, MW09-21, MW09-22 and MW09-25.
- The only MOE Table 3 standard exceedence for metals in groundwater was copper that was measured in monitoring well MW09-9. The concentrations of several PAH parameters exceeded the MOE Table 3 standards in eleven monitoring wells at the site.
- Groundwater is observed to be at the same level as the Ottawa River across the entire site, therefore there was a very low hydraulic gradient and the on-site groundwater is

expected to flow at a slow velocity (i.e., less than 1 m year). Based on this rate, the risk to off-site aquatic receptors is low since the amount of groundwater that would be discharging to the river would be low. *A semi-annual surface water and groundwater monitoring program should be established to determine if the documented groundwater exceedences are adversely impacting the Ottawa River and determine if there are any groundwater quality trends. The estimated cost to complete the semi-annual groundwater monitoring would be in the range of $12,000 to $15,000. At the same time, a PQRA, as described above, can be performed.*

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Tables

1.0 Introduction

Trow Associates Inc. (Trow) was retained by the National Capital Commission (NCC), under Standing Offer Agreement SOA 543281, to conduct a Phase II Environmental Site Assessment (ESA) at Richmond Landing in Ottawa, a peninsula of land that is directly south of Victoria Island on the south shore of the Ottawa River, hereinafter referred to as the 'site'. The Phase II ESA was completed in accordance with the scope of work as defined in the NCC Terms of Reference dated November 3, 2008 and Trow's proposal of November 17, 2008 and follow-up work proposals of February 5, and May 6, 2009.

1.1. Objectives

As stated in the NCC TOR, the objectives of this project are to:

- Compile and summarize existing environmental characterization data for the site;
- Conduct additional sampling/monitoring at the site, as necessary, to address any data gaps and/or reassess impacts identified during previous site investigations;
- Characterize environmental conditions in areas of the site that have not been subject to environmental site assessment;
- Define the extent and volume of contaminated materials at the site relative to applicable guidelines and criteria. Provide diagrams outlining impacted areas;
- Recommend various options for further assessment, site remediation and/or risk management associated with the contaminants present on the site, to satisfy applicable guidelines and criteria. Provide estimated costs of each option; and
- Develop a soil management plan to be used in the potential development project. Soil management will consist of procedures for the management of excavated soil, the potential re-use of soil on the site, the requirements and restrictions with respect to off-site disposal and recommended health and safety procedures. Provide estimated costs of each option.

1.2. Scope of Work

In order to satisfy the project objectives, Trow proposes to perform the following tasks:

- Compile and summarize existing environmental conditions by completing a report review to prepare this workplan;
- Drill boreholes, collect soil samples and install monitoring wells at several locations on the site;
- Submit selected surface and subsurface soil samples and worst case soil samples based on field evidence of impact for laboratory analyses;
- Conduct groundwater sampling and analysis at all monitoring wells;

- Define the extent and volume of contaminated area(s) on the site in relation to federal and provincial parkland criteria;
- Identify and recommend remedial and/or risk management options for the impacted area(s);
- Develop a soil management plan for the site, and
- Summarize the results in a comprehensive report.

2.0 Project Background

2.1. Site Description

The site has an area of approximately 1.15 hectares and is a peninsula of land located along the south shore of the Ottawa River, just east of the Portage Bridge in Ottawa (Figure 1 in Appendix A). The site is used as parkland with recreation trails.

The site has moderate to high archaeological interest. Therefore, an archaeologist was present during the Phase II ESA drilling program to monitor the subsurface conditions.

A monument may be constructed by the NCC in the northeast corner of the site (Figure 2 in Appendix A) which may require that soil be removed in that area to construct a base for the structure. The surface soil in the east half of the site may also have to be removed for landscaping purposes and rehabilitation of the walking trails.

2.2. Background

Trow has reviewed the following environmental reports that were provided by the NCC:

Intera Technologies Ltd., August 1989, *Initial Site Characterization at Richmond Landing Ottawa, Ontario*.

Ontario Archaeological Consulting Services, 1991, *Archaeological Site Identification Strategy, Core Area West (Lebreton, Bayview, The Islands and Brewery Creek), Ottawa, Ontario and Hull, Quebec*.

In 1989, Intera Technologies Ltd. (Intera) completed an Initial Site Characterization at Richmond Landing for the NCC. Intera noted that the site was a former bulk fuel storage facility from around 1930 to 1964. Three large above ground storage tanks used to store gasoline and bulk oil were identified evenly spaced across the site, with smaller tanks grouped together along with a pump house on the west part of the site. The fuel storage facility was demolished in 1965. A significant amount of fill material was brought to the site to construct the bridge in the 1970s and likely to even out the ground surface following removal of the bulk storage facilities.

Intera installed five minipiezometers around the perimeter of the site and installed three monitoring wells (RL-1 to RL-3) to assess the soil and groundwater conditions at the site. During drilling, limestone bedrock was observed along the northwest shoreline at a depth of 1.2 m in the north part of the site to greater than 5.9 m in the central part of the site. Fill material was found to overly the bedrock in all three boreholes. Groundwater was found above the bedrock surface on most of the site, however, on the western part of the site, groundwater was found within the bedrock. Elevated concentrations of oil and grease, lead and mercury were measured in the soil samples, however, no criteria was cited in the Intera report. No free product was observed in the monitoring wells. Low concentrations of benzene, toluene, ethylbenzene, xylenes (BTEX) parameters were measured in the groundwater samples, indicating low level groundwater impact.

Soil and groundwater analytical results indicated that metals and petroleum hydrocarbons were present on the site at concentrations that would likely exceed the current federal and provincial criteria. The extent of soil and/or groundwater impact at the site is therefore unknown at this time. It is also unlikely that any of the minipiezometers or monitoring wells would still be present on the site in a condition that would allow groundwater sampling to be carried out.

The archaeological desktop study revealed that the site had been occupied from around 1800 to the 1960s. For the majority of the nineteenth century the site was used for commercial purposes such as stores, taverns, lodging and mills. From the turn of the century to the 1930s, the site was used to store lumber. From the 1930s to the 1960s the site was used as a bulk storage facility for gasoline and oil. From the 1960s to the present, the site has been used as parkland. The Portage Bridge was constructed in the 1970s and therefore fill was placed on the site along the east side of the bridge.

Based on the above report review, Trow recommended that a preliminary site visit be completed to determine if there were any monitoring wells still left at the site and if there were, their condition was documented. In addition, the site visit determined locations for the twenty-five proposed boreholes and any site access issues. The proposed borehole locations were reviewed by an archaeologist to ensure that they were not located on a potential historical asset.

In addition, it was recommended that the soil and groundwater samples be submitted for analysis of petroleum hydrocarbons (PHC), polycyclic aromatic hydrocarbons (PAH), volatile organic compounds (VOC), polychlorinated biphenyls (PCB) and metals to assess the potential impact from former on-site activities.

3.0 Methodology

3.1. Field Preparation

Prior to commencing the intrusive work, a health and safety plan was prepared and was implemented during all field activities. The locations of underground utilities including telephone, natural gas and electrical lines were then marked out by local locating companies. A private utility locating service also cleared the individual borehole locations on the day of drilling. Trow also had a copy of a NCC work entry permit on hand during all field work at the site.

3.2. Drilling and Soil Sampling

The first part of the drilling program for the Phase II ESA was conducted from January 6 to January 13, 2009, when fifteen boreholes (MW09-1 to MW09-15) were advanced on the site under the full time supervision of Trow staff. The second part of the drilling program was conducted from February 23 to February 26, 2009 when ten boreholes (MW09-16 to MW09-25) were drilled on the site under the full time supervision of Trow staff. The boreholes were advanced using a track-mounted CME 75 drilling machine equipped with hollow-stem augers and split spoon samplers. No petroleum-based greases or solvents were used during the drilling activities. The boreholes were advanced to completion depths of between 3.0 and 10.7 metres below ground surface (mbgs) depending on their relative locations on the site which has higher elevations to the west. Boreholes MW09-1, MW09-2, MW09-3, MW09-18 and MW09-19, which are located on the west part of the site, were terminated in the bedrock using rock coring techniques. The remaining boreholes were terminated when sufficient groundwater was observed in the soil to install a monitoring well. BH09-16 and BH09-17 were advanced to characterize soils for the pathway rehabilitation program and as such were completed to a depth of 2.0 metres and no monitoring wells were installed.

The approximate locations of the boreholes are shown on Figure 2 in Appendix A. Trow staff continuously monitored the drilling activities to log the recovered soil cores and record the depth of the soil sample and the total depth of boring. Field observations are summarized on the borehole logs provided in Appendix B. Representative soil samples were collected from the boreholes at regular intervals using a split-spoon sampler driven in accordance with standard penetration test procedures. The soil samples were collected in general accordance with the following federal document: *Guidance Manual on Sampling Analysis, and Data Management for Contaminated Sites – Volume I: Main Report* [CCME 1993] and *Subsurface Assessment Handbook for Contaminated Sites* [CCME, 1994]. It should be noted that the boreholes were advanced in the overburden through mostly imported fill and some rubble and debris and as such minimal spoils were brought to surface on the auger flights and the recovery of soil samples using the split spoons was often poor. The poor recovery limited the number of duplicate samples that could be submitted for quality assurance purposes. In total, four duplicate soil samples were submitted for analyses. Also, since the overburden materials at the subject site consisted mainly of imported fill, a significant amount of silica sand (approximately 80 bags) was needed to backfill around the monitoring wells. Please refer to Section 5.1 for more information on the subsurface conditions.

During soil sampling, the stainless steel sampling equipment was cleaned between sampling intervals by washing with a potable water/phosphate-free detergent solution followed by a rinse with distilled water to reduce the potential for cross-contamination. Pre-cleaned augers were used during operations at the site.

Disposable nitrile gloves (i.e., one pair per sample) were used during sample handling. A portion of each soil core was placed in a sealed "zip-lock" plastic bag and allowed to reach ambient temperature prior to field screening with a combustible gas detector that was calibrated with a hexane reference gas prior to use. The combustible vapour measurements were made by inserting the instrument's probe into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings provide a real-time indication of the relative concentration of organic vapours encountered in the subsurface during drilling and aid in the selection of soil samples for analysis. The combustible vapour readings, in ppm hexane equivalent, are provided on the borehole logs in Appendix B.

The remaining portion of each soil core was placed directly into pre-cleaned, laboratory-supplied glass sample jars. The jars that contained samples intended for analysis for VOCs and/or the lighter hydrocarbon fractions were filled so as to minimize head-space and reduce the potential for induced volatilization during storage/transport prior to analysis. All soil samples were placed in clean ice-packed coolers prior to and during transportation to the laboratory. One worst case soil sample and one surface soil sample (0.0 to 0.6 m) from each borehole were submitted to Paracel Laboratories Ltd. (Paracel) of Ottawa. The samples were transported/submitted under Chain of Custody documentation. Soil samples were selected for laboratory analysis on the basis of their combustible gas measurements ("vapour reading") and/or visual or olfactory evidence of impacts.

In addition, on May 19, 2009, Trow collected shallow surface soil samples from adjacent to the 25 existing borehole locations at the site. The samples were collected using a hand shovel from within the top 0.1 m of the ground surface at these locations.

A total of fifty-three soil samples (including four duplicate samples) were submitted for analysis of PHC, PAH, PCB, VOC and/or metals. In addition, two representative samples of the waste soil that may be brought to the landfill during redevelopment were submitted for leachate analysis to characterize the soil for landfill acceptance.

3.3. Well Installation

The field program consisted of soil and groundwater sampling and submission of samples for laboratory analysis to determine the presence or absence of subsurface contamination in twenty-three new wells.

Twenty-three of the boreholes were completed as groundwater monitoring wells. The wells were installed to permit water level measurements, groundwater flow direction determination, and the collection of groundwater samples for analytical purposes. Boreholes MW09-1 to MW09-3, MW09-18 and MW09-19 were advanced into bedrock using NQ diamond coring. The NQ coring size does not permit the installation of a 50 mm monitoring well, therefore these

monitoring wells were constructed with 32 mm diameter PVC pipe. Boreholes MW09-4 to MW09-15 and MW09-20 to MW09-25 are overburden boreholes and were advanced using hollow stem augers. The monitoring wells installed in these boreholes were constructed of 50 mm diameter PVC pipe, with well screens positioned to straddle the static groundwater elevation. A clean silica sandpack was placed around the screen and isolated with bentonite. The wells were completed at ground surface with flush-mounted steel casings.

Upon completion, the well locations were surveyed using a portable Global Positioning System receiver. Trow also surveyed the elevations of each of the monitoring wells and boreholes. The geodetic elevation of the ground surface MW09-1 was established using a Trimble R8 GPS unit with a vertical accuracy of +/- 3 cm.

3.4. Groundwater Sampling

On January 21, 2009, the static water level was measured, the depth of each well was recorded and the wells, MW09-1 to MW09-15, were sampled. On March 5th, 2009, the static water level was measured, the depth of each well was recorded and the wells, MW09-18 to MW09-25, were sampled. Trow used an interface probe to measure the possible presence of dense non-aqueous phase liquid (DNAPL) and light non-aqueous phase liquid (LNAPL) in each monitoring well. Once the volume of standing water within the well bore had been calculated, a minimum of three well volumes was purged prior to sample collection. All purged water were contained in 205 litre steel drums and disposed of by a licensed contractor. The purge water was monitored for visual and olfactory evidence of contamination (sheen and odour). The sampling program was completed in accordance with Environment Canada's *Technical Assistance Bulletins for Contaminated Sites TAB #5*. The groundwater samples were collected in general accordance with the following federal documents: *Guidance Manual on Sampling Analysis, and Data Management for Contaminated Sites – Volume I: Main Report* [CCME 1993] and *Subsurface Assessment Handbook for Contaminated Sites* [CCME, 1994]. The groundwater samples were also collected in general accordance with the provincial document *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*, MOE, 1996. All groundwater samples were collected in laboratory provided sample bottles that contained appropriate chemical preservatives depending on the type of analysis to be performed.

A total of twenty-four groundwater samples (twenty-two and two blind duplicates) were submitted for laboratory analysis of PHC, PAH, PCB, VOC and/or metals. The water samples that were submitted for metals analysis were filtered in the field using a 0.45 um in-line filter. MW09-18 was only sampled for PHC and VOC due to a limited amount of water within the well. MW09-19 was dry and therefore not sampled.

3.4.1. Field QA/QC Program

A quality assurance (QA) and quality control (QC) program was implemented to ensure that the analytical results received are accurate and dependable. The QA/QC program incorporated the following components:

- Collection of two blind duplicate groundwater samples and four blind duplicate soil samples for PHC, PAH, PCB, VOC and metals;

- Prevention of cross-contamination;
- Proper field note-taking procedures;
- Sampling containers, preservation and hold times;
- Sampling, packaging and transport;
- Sample identification requirements;
- Chain custody;
- Sample transmittal documentation;
- Initial check of samples and documentation;
- Verification of the integrity and condition of all sample coolers.

As mentioned previously, the poor sample recovery during borehole drilling limited the number of duplicate soil samples that could be submitted for laboratory analyses.

3.4.2. Laboratory QA/QC Program

All samples were shipped to Paracel, which is certified by the Canadian Association for Laboratory Accreditation Inc. (CALA). The laboratory QA/QC program involved the systematic analysis of control standards for the purpose of optimizing the measuring system as well as establishing system precision and accuracy and included the following: calibration standards, method blanks, reference standards, spiked samples, surrogates and duplicates.

4.0 Regulatory Framework

4.1. Soil

The CCME *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health* (revised 2008) for residential/park land use was used as the primary guideline to compare analytical data. New CCME guidelines for PAH were used to compare the PAH concentrations in soil at the site. The CCME has developed B(a)P Total Potency Equivalent (TPE) which is calculated for potentially carcinogenic PAH by multiplying various PAH parameter concentrations by potency equivalent factors and then summing the products. The soil B(a)P TPE is intended to ensure that the incremental lifetime cancer risk from ingestion, inhalation and dermal contact does not exceed one in 1×10^{-5}. If coal tar or creosote are present in the soil, the B(a)P TPE concentration should be multiplied by 3 prior to comparison with guideline to account for the risks associated with other potentially carcinogenic PAH that may be present. Coal tar and creosote were not observed at the subject site and therefore the B(a)P TPE was not multiplied by 3.

The CCME *Canada-Wide Standards (CWS) for Petroleum Hydrocarbons (PHC) in Soil* (January 2008), for coarse-grained soil, were used to compare the PHC results in the submitted soil samples. In addition to the CCME federal criteria, Trow selected the soil criteria provided in Ontario Regulation 153/04 (O. Reg. 153/04) and the MOE document entitled *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* dated March 9, 2004 for comparison purposes. Due to the close proximity to the Ottawa River (within 30 m of the river), under the provincial regulation, the site is considered a sensitive area and was compared to Table 1 of the MOE Standards (background concentrations). If the soil is to be disposed of to another site, it must meet the MOE Table 1 concentrations or be disposed of at a licensed landfill. The soil quality was also compared to the MOE Table 3 standards for residential/parkland property use in a non-potable ground water setting.

4.2. Groundwater

With respect to groundwater, there are no CCME criteria for non-potable situations, such as this case. For illustrative purposes, the groundwater analytical results from the monitoring wells were compared to Table 1 of the MOE Standards (background concentrations) and the MOE Table 3 standards (coarse grained soils in a non-potable groundwater situation). As stated in Part IX of the MOE Standard, *a property does not meet an applicable site condition standard in relation to petroleum hydrocarbons unless it is determined that there is no evidence of free product, including but not limited to, any visible petroleum hydrocarbon film or sheen present in the groundwater sample*.

In cases where no visible or olfactory evidence of PHC contamination are present, the MOE expects the proponent to either establish their own site-specific criteria by performing a comprehensive site-specific risk assessment or to propose an alternate generic criterion that is currently being used by another province or jurisdiction. Consequently, Trow compared the analytical results for this site to the Atlantic Partners in Risk Based Corrective Action (RBCA) Implementation (PIRI November 2003) Tier I levels for petroleum hydrocarbons (residential/parkland land use in a non-potable groundwater scenario). The RBCA Modified

TPH is defined as C_6 to C_{32} - BTEX. Using the CWS for PHC fractions described above, the RBCA Modified TPH can be calculated as follows: F_1+F_2+F_3 or C_6 to C_{34}. It is noted that the F_1 fraction does not include BTEX parameters and the F_2+F_3 fractions do not include PAH parameters.

Due to the close proximity to the Ottawa River, Trow has (for illustrative purposes) compared the groundwater analytical results to the CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life (updated December 2007). However, this guideline was developed for the protection of freshwater aquatic life and the guideline is applicable to surface water and not to groundwater.

5.0 Results

5.1. Field Observations

Based on field observations from the boreholes, the soil stratigraphy generally consisted of topsoil overlying silty sand or silty sand fill with some gravel (occasional bricks and glass). The depth to limestone bedrock increases to the west due to the bridge embankment. Bedrock was found at 1.4 m in MW09-1, 2.8 m in MW09-2, 9.2 m in MW09-3, 7.2 m in MW09-19 and 9.0 m in MW09-18. A concrete slab related to the former above ground storage tanks was encountered in MW09-23 at a depth of 1.7 m to 1.8 m. The borehole logs are presented in Appendix B. The borehole locations are shown on Figure 2 in Appendix A. Geological cross-sections are presented in Figures 3 and 4 in Appendix A. Field evidence of petroleum hydrocarbon impact (staining and odours) was observed in the split spoon soil samples retrieved from MW09-3, MW09-4, MW09-8, MW09-10, MW09-12, MW09-13, MW09-18, MW09-19, MW09-20, MW09-22 and MW09-25. No field evidence of petroleum impact was observed either above or below the slab encountered at MW09-23.

On January 21, 2009, the depth to water measured in the monitoring wells ranged from approximately 1.16 to 8.22 mbgs. On March 5, 2009, the depth to water measured in the monitoring wells ranged from approximately 2.19 to 8.81mbgs. The monitoring well with the greatest depth to water (MW09-18) is located on the western edge of the site adjacent to the Portage Bridge where the ground surface is significantly higher than the east part of the site. Monitoring well MW09-1 had been covered over with topsoil and sod in early June 2009 and could not be found. A summary of the groundwater elevations and purge water observations are presented in Tables 5.1-1 and 5.1-2.

No floating petroleum product or dense non-aqueous phase liquids were measured in any of the monitoring wells. However, a petroleum sheen was observed on the purge water from several monitoring wells.

Table 5.1-1 Summary of Groundwater Elevations and Field Notes, January 21, 2009

MW NAME	WL (TOC)	DEPTH TO BOTTOM	ELEVATION (TOC)	WATER ELEVATION (M)	PRESENCE OF DNAPL OR LNAPL	NOTES	GPS COORDINATES (EASTING AND NORTHING M)
MW09-1	3.07	4.43	46.42	43.35	No	brown, cloudy, no odour or sheen	could not be found in June 09
MW09-2	2.65	4.67	46.26	43.61	No	brown, cloudy, no odour or sheen	444344 5029893
MW09-3	8.09	10.36	51.52	43.43	No	brown, cloudy, no odour or sheen	444350 5029862
MW09-4	6.2	7.85	49.43	43.23	No	dark brown, cloudy, petroleum odour and sheen	444365 5029879
MW09-5	3.67	4.74	46.91	43.24	No	brown, cloudy, no odour or sheen	444372 5029872
MW09-6	3.69	5.04	46.92	43.23	Yes	dark brown/black, cloudy, petroleum odour and sheen	444387 5029911
MW09-7	3.22	4.27	46.46	43.24	No	dark brown, cloudy, petroleum odour and sheen	444401 5029898
MW09-8	3.4	4.5	46.62	43.22	No	brown, cloudy, no odour or sheen	444380 5029820
MW09-9	3.16	4.42	46.39	43.23	No	brown, cloudy, no odour or sheen	444399 5029919
MW09-10	2.95	4.15	46.18	43.23	No	dark brown, cloudy, petroleum odour and sheen	444390 5029940
MW09-11	2.77	4.1	45.99	43.22	Yes	dark brown, cloudy, petroleum odour and sheen	444413 5029936
MW09-12	2.87	4.28	46.11	43.24	No	brown, slightly cloudy, no odour or sheen	444406 5029950
MW09-13	2.01	3.3	45.25	43.24	No	brown, cloudy, no odour or sheen	444434 5029962
MW09-14	2.19	2.9	45.43	43.24	No	brown, cloudy, no odour or sheen	444420 5029971
MW09-15	1.08	2.83	44.32	43.24	No	brown, cloudy, no odour or sheen	444439 5029989

WL - water level measured from top of plastic casing
TOC - top of plastic well casing
NM – not measured
NA – not applicable
DNAPL – dense non-aqueous phase liquid
LNAPL – light non-aqueous phase liquid
The presence or absence of DNAPL/LNAPL in monitoring wells is based on indication from the interface probe. The presence of sheen was based on observations of the purge water.

Table 5.1-2 Summary of Groundwater Elevations and Field Notes, March 5th, 2009

MW NAME	WL (TOC)	DEPTH TO BOTTOM	ELEVATION (TOC)	WATER ELEVATION (M)	PRESENCE OF DNAPL OR LNAPL	NOTES	GPS COORDINATES (EASTING AND NORTHING M)
MW09-2	2.96	3.58	46.26	43.3	N/A	N/A	444344 5029893
MW09-5	3.79	4.95	46.91	43.12	N/A	N/A	444372 5029872
MW09-6	3.78	4.84	46.92	43.14	N/A	N/A	444387 5029911
MW09-7	3.33	4.26	46.46	43.13	N/A	N/A	444401 5029898
MW09-9	3.26	4.34	46.39	43.13	N/A	N/A	444399 5029919
MW09-12	2.97	4.27	46.11	43.14	N/A	N/A	444406 5029950
MW09-13	2.11	3.34	45.25	43.14	N/A	N/A	444434 5029962
MW09-18	8.68	9.6	55.38	46.7	No	brown-grey, cloudy, sheen and odour	444312 5029851
MW09-19	Dry	7.63	52.81	DRY	N/A	N/A	444337 5029863
MW09-20	3.97	4.9	47.1	43.13	No	brown, cloudy, petroleum sheen and odour	444369 5029895
MW09-21	3.52	4.4	46.5	42.98	No	brown, cloudy, petroleum sheen and odour	444382 5029931
MW09-22	2.82	4.23	45.94	43.12	No	brown, cloudy, petroleum sheen and odour	444398 5029947
MW09-23	3.07	4.15	46.21	43.14	No	brown, cloudy, no odour or sheen	444400 5029933
MW09-24	2.82	3.1	45.95	43.13	No	brown, cloudy, no odour or sheen	444411 5029921
MW09-25	2.42	4.12	45.56	43.14	No	brown, cloudy, petroleum sheen and odour	444427 5029942

WL - water level measured from top of plastic casing
TOC - top of plastic well casing
NM – not measured
NA – not applicable
DNAPL – dense non-aqueous phase liquid
LNAPL – light non-aqueous phase liquid
The presence or absence of DNAPL/LNAPL in monitoring wells is based on indication from the interface probe. The presence of sheen was based on observations of the purge water.

Based on the measured groundwater elevations in monitoring wells across the site, the water table is fairly flat and is consistent with the river level. Based on field measurements, there was a very low hydraulic gradient measured on the site (i.e., water level elevations were within 2 cm across the eastern two-thirds of the site) and therefore, the on-site groundwater contaminant plume is expected to flow at a slow velocity (i.e., less than 1 m year) towards the Ottawa River.

5.2. Analytical Findings

5.2.1. Interpretation of QC Data

To ensure that laboratory QA/QC checks were acceptable, blind duplicate soil and groundwater samples were submitted for laboratory analysis of PHC, PAH, PCB, VOC and metals. As indicated in Tables 3, 4, 7 and 8 in Appendix C, PCB or VOC parameters were not detected in the primary or duplicate soil or groundwater samples. The average relative percent difference (RPD) for the two duplicate groundwater sample pairs that were analyzed for PAH was 18% compared to 50% RPD upset limit. The upset limit refers to the threshold RPD beyond which the level of confidence in the analytical precision, field precision and sample homogeneity is deemed to be too low to be relied upon. The RPD for metals parameters in the two groundwater samples was 14% compared to 35% RPD upset limit for metals. The RPD for PHC parameters in groundwater was 20%, compared to the RPD upset limit for organic parameters of 40%. The RPD for PAH in the four soil samples was 47% compared to 50% RPD upset limit. The RPD for metals parameters in the four soil samples was 3% compared to 35% RPD upset limit. The RPD for PHC parameters in soil was 68%, compared to the RPD upset limit for organic parameters of 50%. However, the variability between the soil samples and their duplicates was primarily in the heavier PHC fractions (F3 and F4), with the lighter fractions (F1 and F2) and the BTEX parameters mainly below the detection limit.

Given the field and laboratory QA/QC noted above, it is Trow's professional opinion that the data collected is of a known quality and representative of the site conditions. As such, it can be relied upon for further interpretation in this report with respect to assessing site conditions.

5.2.2. Surface Soil Results

For the purposes of this investigation, Trow defines surface soil as soil from ground surface to approximately 0.6 m depth. Shallow surface soil is from 0.0 to 0.1 m. The analytical results, along with the recommended CCME and MOE criteria are presented in Tables 1 to 5 in Appendix C. The laboratory Certificates of Analysis are presented in Appendix D.

There were no exceedences of the CCME or MOE criteria for PHC, VOC, PAH, metals or PCB in the shallow surface soil samples (0.0 to 0.1 m) collected at the site.

There were only three surface soil (0.0 to 0.6 m) samples (MW09-3, MW09-11 and MW09-22) that exceeded the CCME metals and/or PHC soil quality guidelines and they are shown on Figure 5 in Appendix A. None of these locations are in the area of the proposed monument. There were no CCME exceedences of VOC, PAH or PCB parameters in the surface soil samples.

There was one surface soil sample from the proposed location of the monument (MW09-14 SS1)

that had exceedences of MOE Table 1 background concentrations. The sample had three PAH parameters in the primary sample (benzo[a]pyrene, benzo[b]fluoranthene, and chrysene) and several in the blind duplicate sample that exceeded the MOE Table 1 background concentrations. The same duplicate sample (MW09-14 SS1) had concentrations of benzo[b]fluoranthene and chrysene that exceeded the MOE Table 3 standards. With respect the remainder of the site, the soil sample from MW09-11 had PHC F2 concentration that exceeded the MOE Table 3 criterion. The soil samples from MW09-9, MW09-19, MW09-20, and MW09-23, had concentrations of one or more PAH parameters that exceeded the MOE Table 3 standards. The MOE Table 3 exceedences are shown on Figure 6 in Appendix A

Trow submitted two composite surface soil samples for laboratory analyses for landfill acceptance in accordance with O.Reg. 558. The first composite sample was located in the area of the proposed monument (MW09-12, MW09-14 and MW09-15) and the second composite sample was located in the western half of the site (BH09-16 to MW09-20). The results of the O.Reg. 558 leachate analyses, presented in Table 1 in Appendix C, indicated that the soils are non-hazardous and could be disposed of, if required, at a licensed landfill.

5.2.3. Subsurface Soil Results

For the purposes of this investigation, Trow defines subsurface soil as soil from deeper than approximately 0.6 m below grade. The analytical results, along with the recommended CCME and MOE criteria are presented in Tables 1 to 5 in Appendix C. The laboratory Certificates of Analysis are presented in Appendix D. There were several soil samples collected at depth that exceeded the CCME metals and/or PHC soil quality guidelines and they are shown on Figure 7 in Appendix A. Only one sample (MW09-6 SS2) had concentrations of PAH parameters that exceeded the CCME soil quality guidelines. The majority of the site, excluding the eastern part of the site where the monument is proposed, is impacted with at least one of either PHC, PAH or metals parameters that exceed the CCME soil quality guidelines.

The only subsurface soil exceedence collected at the location of the proposed monument at a depth of 1.5 to 2.1 m was a MOE Table 1 exceedence of molybdenum at MW09-15 (measured concentration of 3 µg/g – guideline value of 2.5 µg/g). The western two-thirds of the site, is impacted with at least one of either PHC, PAH or metals parameters that exceed the MOE Table 3 soil quality standards guidelines and they are shown on Figure 8 in Appendix A.

5.2.4. Groundwater Results

The analytical results, along with the appropriate MOE, CCME and/or Atlantic RBCA criteria are presented in Table 6 to Table 9 in Appendix C. The laboratory Certificates of Analysis are presented in Appendix D. Monitoring wells MW09-1, MW09-2, MW09-3, MW09-18 and MW09-19 were installed in the shallow bedrock. All other monitoring wells were installed in fill and overburden materials.

The chemical parameters that exceeded the MOE Table 3 groundwater criteria are shown on Figure 9 in Appendix A. There was only one metals exceedence of the MOE Table 3 standards and that was copper in MW09-9. The concentrations of several PAH parameters exceeded the MOE Table 3 standards in eleven monitoring wells (MW09-6 to MW09-13 and MW09-22 to

MOE Table 3 standards in eleven monitoring wells (MW09-6 to MW09-13 and MW09-22 to MW090-24). The groundwater samples collected from MW09-11 and MW09-22 also exceeded the Atlantic RBCA modified PHC criterion.

A petroleum sheen was observed on the purge water of the following overburden monitoring wells: MW09-4, MW09-6, MW09-7, MW09-10, MW09-11, MW09-20, MW09-21, MW09-22 and MW09-25. A sheen was observed on the purge water of MW09-18 which is a bedrock monitoring well:

The chemical parameters that exceeded the MOE Table 1 groundwater criteria are shown on Figure 10 in Appendix A. The groundwater sample collected from MW09-18 had concentrations of BTEX parameters that exceeded the MOE Table 1 standards. In addition, samples from MW09-3, MW09-4, and MW09-21 had concentrations of toluene that exceeded the MOE Table 1 standard.

Concentrations of copper in 18 monitoring wells exceeded the MOE Table 1 standard. The concentrations of several other metals (boron, cobalt, lead, molybdenum, selenium, vanadium, and zinc) exceeded one or more of the MOE Table 1 standards in MW09-1 to MW09-5, MW09-11 and MW09-21. The concentrations of several PAH parameters exceeded the MOE Table 1 standards in every monitoring well except MW09-15, which is located at the easternmost point of the site.

The concentrations of toluene in MW09-3, MW09-4, MW09-18 and MW09-21 exceeded the CCME freshwater aquatic life (FAL) guideline. The concentrations of chromium and copper exceeded the CCME FAL guidelines in most of the monitoring wells. The concentration of zinc in MW09-1 exceeded the CCME FAL guideline. The concentrations of several PAH parameters exceeded the CCME FAL guidelines in every monitoring well. The CCME FAL guidelines are presented for discussion purposes only since the guidelines were developed for the protection of freshwater aquatic life and the guidelines are applicable to surface water and not to groundwater.

6.0 Discussion of Impacts

6.1. Soil

Evidence of waste in the form of wood, glass, coal, brick, mortar and various other fragments was observed in most boreholes. The presence of this type of material could account for the CCME metals and PAH impacts to the soil, both at the surface and the subsurface. The waste material was found at all levels of the fill material at the site, except near the ground surface. The above-noted waste material only extended to a depth of 0.6 m in the vicinity of the proposed monument.

Widespread metal exceedences were not observed, however the soil in the central part of the site is impacted by metals. The locations of the PHC impacts to soil are in the general vicinity of the former above ground bulk storage tank locations, while the PAH impacts are wide-spread across the site.

There was one surface soil sample from the proposed location of the monument (MW09-14 SS1) that had exceedences of MOE Table 3 and MOE Table 1 background concentrations. In addition, a subsurface soil sample exceeded the MOE Table 1 standard for molybdenum at the location of the proposed monument at a depth of 1.5 to 2.1 m. *Therefore, the soil that is excavated from the monument area can be re-used on the site, however it will have to be covered with at least 0.3 m of clean soil. Refer to Section 7.0 for a soil management plan.*

No shallow surface soil (i.e., less than 0.1 m) exceedences of the CCME parkland guidelines or MOE Table 1 background soil concentrations were measured. Therefore, there is a barrier between the human users of the site and the deeper impacted soil measured at the site. *However, Trow recommends that a preliminary quantitative risk assessment (PQRA) be performed to determine the most appropriate risk management measures to address the potential risks to both on-site and off-site human and ecological receptors from the impacted soil located deeper than 0.1 m.*

If removal of all the impacted soil from the site is considered, the volume of impacted soil to be removed, along with the associated costs, depends on several assumptions. Assuming that the impacted soil in the unsaturated zone (i.e., above the water table) extends to a depth of 3 m across the majority of the site and the soil is excavated to within 10 m of the edge of the river, the resulting volume of impacted soil would be approximately 20,000 m^3. The soil within 10 m of the river would not be removed due to slope stability and shoreline erosion issues. Assuming a soil density of 2 tonnes/m^3 and a cost to dispose of the soil and backfill the excavation of $150/tonne, the total cost would be $6,000,000. *However, Trow recommends the completion of a PQRA at the site. The PQRA will assess human health and ecological risks and provide the basis for developing a preliminary remedial action plan/risk management plan (RAP/RMP) to guide site management decisions. The approximate cost to complete the PQRA and RAP/RMP is approximately $25,000.*

6.2. Groundwater

There were no exceedences of the MOE Table 3 groundwater quality standards for PCB, VOC, or BTEX parameters in any of the water samples collected at the site. The modified PHC concentrations measured in samples collected from MW09-11 and MW09-22 exceeded the Atlantic RBCA modified PHC criterion. These two monitoring wells are located on the south and north edges, respectively, in the central part of the site and are in close proximity to a former above ground bulk fuel storage tank location. The only MOE Table 3 standard exceedence for metals in groundwater was copper that was measured in monitoring well MW09-9. The concentrations of several PAH parameters exceeded the MOE Table 3 standards in eleven monitoring wells at the site. Based on field measurements, there was a very low hydraulic gradient measured on the site and therefore, the on-site groundwater contaminant plume is expected to flow at a slow velocity (i.e., less than 1 m year) towards the Ottawa River. Based on this rate, the risk to off-site aquatic receptors is low since the amount of groundwater that would be discharging to the river would be low. *However, surface water samples of the river should be collected to confirm the potential risk to aquatic receptors. A semi-annual surface water and groundwater monitoring program should be established to determine if the documented groundwater exceedences are adversely impacting the Ottawa River and determine if there are any groundwater quality trends. The estimated cost to complete the semi-annual groundwater monitoring would be in the range of $12,000 to $15,000. At the same time, a PQRA, as described above in Section 6.1, can be performed. The surface water and groundwater monitoring program should continue for a period of three to five years. At that time, the monitoring program can be re-evaluated.*

One of the possible outcomes of the PQRA would be to address the groundwater impacts by installing a groundwater pump and treat system. Alternatively, groundwater impacts could be addressed in conjunction with soil remediation, where exposed groundwater could be pumped and treated during soil excavation. This latter option may prove to be a cost effective method to address the observed groundwater impacts.

A petroleum sheen was observed on the purge water of the following overburden monitoring wells: MW09-4, MW09-6, MW09-7, MW09-10, MW09-11, MW09-20, MW09-21, MW09-22 and MW09-25. A petroleum sheen was also observed on the purge water of bedrock monitoring well MW09-18.

If groundwater is encountered during excavation for the proposed monument base, it will have to be managed appropriately. For groundwater management procedures, Refer to Section 7.3.

7.0 Soil Management Plan

7.1. Introduction

This soil management plan has been developed to aid in the planning for the installation of a monument in the northeast part of the peninsula of land known as Richmond Landing in Ottawa. Trow understands that the construction of the monument may require excavation to a depth of approximately 2 m below the ground surface. In addition, the surface soil in the east half of the site may also have to be removed for landscaping purposes and rehabilitation of the walking trails.

7.2. Soil Conditions

The soil stratigraphy generally consisted of topsoil overlying silty sand or silty sand fill with some gravel. Evidence of waste in the form of wood, glass, coal, brick, mortar and various other fragments was observed in most boreholes drilled at the site. This waste material only extended to a depth of 0.6 m in the vicinity of the proposed monument, but extends to greater than 3 m over the eastern part of the site.

7.3. Groundwater Conditions

Groundwater was observed at a depth of 2.2 m from the ground surface in the vicinity of the proposed monument. Due to the expected depth of the construction excavation, it is not anticipated that excavation dewatering will be required.

The groundwater quality measured in the monitoring wells located in the vicinity of the monument (MW09-13 to MW09-15) satisfied the MOE Table 3 standards, with the exception of benzo[ghi]perylene in MW09-13. In addition, the water quality did not satisfy the CCME freshwater aquatic life guidelines and therefore, if any excavation dewatering is required as part of the monument construction, the water will either require treatment prior to disposal to a storm sewer or be disposed of by a licensed waste hauler.

7.4. Re-Use on Site as Backfill Material

There was one surface soil (0 to 0.6 m) sample from the proposed location of the monument (MW09-14 SS1) that had exceedences of MOE Table 3 and MOE Table 1 background concentrations. In addition, a subsurface soil sample exceeded the MOE Table 1 standard for molybdenum at the location of the proposed monument at a depth of 1.5 to 2.1 m. *Therefore, the soil that is excavated from the monument area can be re-used on the site, however it will have to be covered with at least 0.3 m of clean soil. If the material is temporarily stockpiled, it should be covered with plastic sheeting overnight to prevent generation of dust and also run-off from rain. If debris (wood, glass, steel, etc.) is encountered during excavation, it should be segregated from the backfill material and disposed of as waste to a licensed landfill.*

7.5. Off-Site Disposal of Waste Soil

The soil in the area of the proposed monument had exceedences of MOE Table 1 background concentrations for PAH and metal parameters. Therefore, if the soil from the monument area is deemed to be excess soil (i.e., it cannot be re-used on the site), it will have to be disposed of at a licensed landfill. Similarly, if excess soil is generated during landscaping or rehabilitation of the walking trails, it will have to be disposed of at a licensed landfill.

The landfill will require a letter stating the source of the waste, the laboratory results compared to O. Reg. 558-00 criteria, and a copy of the laboratory certificate of analysis for the leachate test. The landfill will not accept waste with a high percentage of large pieces of concrete or other deleterious material. If slabs of concrete or boulders are encountered, they should be broken up prior to being placed in the dump truck.

7.6. Health and Safety Plan

A Health and Safety Plan (HASP) should be developed to address contaminants of concern that may be encountered during the construction activities. The HASP includes general health, safety and emergency response requirements necessary when conducting activities that may require contact with the subsurface materials. The HASP also provides information on the anticipated hazards that may be encountered and the minimum safe working practices and procedures to be followed during any subsurface site work. The HASP does not replace any Health & Safety protocols, procedures, etc. already established by the NCC, but rather is intended to be complimentary to existing protocols.

Situations may arise during site work, which are beyond the scope of the safety procedures in the HASP. In such a situation, it may be necessary to stop on-site work until a revised procedure or HASP is prepared to reflect the changing conditions. It is required that all persons involved with on-site operations read the HASP and acknowledge that they have read and understand all aspects of the HASP.

The HASP will require a description of the proposed work, assignment of responsibilities to supervisors and workers, an assessment of hazards and related risks, and action levels that would trigger the use of upgraded personal protective equipment (PPE) that will be used to ensure that all on-site personnel are adequately protected from potential contaminant exposure.

As a minimum, there should be at least one person on the site with Standard First Aid training during all construction activities. In the event that any on-site worker or visitor becomes injured or ill, the site supervisor should to be notified immediately. Response to the injured or ill party will depend on the severity of the situation and should be considered on an individual basis following Standard First Aid procedures. The HASP should also include a list of emergency contacts, including 911.

8.0 Conclusions and Summary of Recommendations

The following are the significant conclusions resulting from the Phase II ESA, recommendations are provided in italics:

- Trow drilled twenty-five boreholes at the site, twenty-three of which were converted into monitoring wells (MW09-1 to MW09-25) except for BH09-16 and BH09-17.
- Evidence of waste in the form of wood, glass, coal, brick, mortar and various other fragments was observed in most boreholes. The waste material was found at all levels of the fill material at the site, except near the ground surface. The above-noted waste material only extended to a depth of 0.6 m in the vicinity of the proposed monument.
- On March 5, 2009, the depth to water measured in the monitoring wells ranged from approximately 2.19 to 8.81 mbgs. The monitoring well with the greatest depth to water (MW09-18) is located on the western edge of the site adjacent to the Portage Bridge where the ground surface is significantly higher than the east part of the site.
- There were only three surface soil (0.0 to 0.6 m) samples (MW09-3, MW09-11 and MW09-22) that exceeded the CCME metals and/or PHC soil quality guidelines. None of these locations are in the area of the proposed monument. There were no CCME exceedences of VOC, PAH or PCB parameters in the surface soil samples.
- There was one surface soil sample from the proposed location of the monument (MW09-14 SS1) that had exceedences of MOE Table 3 and MOE Table 1 background concentrations. In addition, a subsurface soil sample exceeded the MOE Table 1 standard for molybdenum at the location of the proposed monument at a depth of 1.5 to 2.1 m. *Therefore, the soil that is excavated from the monument area can be re-used on the site, however it will have to be covered with at least 0.3 m of clean soil.*
- There were several soil samples collected at depth that exceeded the CCME metals and/or PHC soil quality guidelines. Only one sample (MW09-6 SS2) had concentrations of PAH parameters that exceeded the CCME soil quality guidelines. The majority of the site, excluding the eastern part of the site where the monument is proposed, is impacted with at least one of either PHC, PAH or metals parameters that exceed the CCME soil quality guidelines.
- No shallow surface soil (i.e., less than 0.1 m) exceedences of the CCME parkland guidelines or MOE Table 1 background soil concentrations were measured. Therefore, there is a barrier between the human users of the site and the deeper impacted soil measured at the site. *However, Trow recommends that a preliminary quantitative risk assessment (PQRA) be performed to determine the most appropriate risk management measures to address the potential risks to both on-site and off-site human and ecological receptors from the impacted soil located deeper than 0.1 m. Trow recommends the completion of a PQRA at the site at a cost of approximately $25,000.*
- There were no exceedences of the MOE Table 3 groundwater quality standards for PCB, VOC, or BTEX parameters in any of the water samples collected at the site. The modified PHC concentrations measured in samples collected from MW09-11 and

MW09-22 exceeded the Atlantic RBCA modified PHC criterion. These two monitoring wells are located on the south and north edges, respectively, in the central part of the site and are in close proximity to a former above ground bulk fuel storage tank location.

- There was visual and olfactory evidence of petroleum hydrocarbon impact (i.e., sheen and odour) detected in the groundwater from MW09-4, MW09-6, MW09-7, MW09-10, MW09-11, MW09-18, MW09-20, MW09-21, MW09-22 and MW09-25.
- The only MOE Table 3 standard exceedence for metals in groundwater was copper that was measured in monitoring well MW09-9. The concentrations of several PAH parameters exceeded the MOE Table 3 standards in eleven monitoring wells at the site.
- Groundwater is observed to be at the same level as the Ottawa River across the entire site, therefore there was a very low hydraulic gradient and the on-site groundwater is expected to flow at a slow velocity (i.e., less than 1 m year). Based on this rate, the risk to off-site aquatic receptors is low since the amount of groundwater that would be discharging to the river would be low. *A semi-annual surface water and groundwater monitoring program should be established to determine if the documented groundwater exceedences are adversely impacting the Ottawa River and determine if there are any groundwater quality trends. The estimated cost to complete the semi-annual groundwater monitoring would be in the range of $12,000 to $15,000. At the same time, a PQRA, as described above, can be performed.*

9.0 References

1. Atlantic Partners in Risk Based Corrective Action (RBCA), September 2003. *Implementation (PIRI November 2003) Tier I levels for petroleum hydrocarbons (residential/parkland land use in a non-potable groundwater scenario).*
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4. CCME. December 2007. Canadian Water Quality Guidelines for the Protection of Aquatic Life.
5. CCME. January 2008. Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil.
6. MOE. 2004. *Soil, Ground Water, and Sediment Standards of Use Under Part XV.I of the Environmental Protection Act.*
7. Intera Technologies Ltd., August 1989. *Initial Site Characterization at Richmond Landing Ottawa, Ontario*.
8. Ontario Archeological Consulting Services, 1991. *Archeological Site Identification Strategy, Core Area West (Lebreton, Bayview, The Islands and Brewery Creek), Ottawa, Ontario and Hull, Quebec*.

10.0 Limitations

This report has been prepared for and is intended for the exclusive use of the NCC. The contents of this report should not be relied upon by any other party without the expressed written consent of Trow. The findings are considered to be representative of site conditions at the time of our site investigation.

It should also be noted that current environmental guidelines and regulations are subject to change, and such changes, when put into effect, could alter the conclusions and recommendations noted throughout this report. The conclusions and recommendations noted in this report reflect existing site conditions with respect to the current environmental condition of the subject site at the time of this assessment summary.

The results of this evaluation are qualified by the fact that only limited soil sampling and chemical testing were conducted at the site. The concentrations of parameters measured may not be representative of conditions at locations intermediate to those locations sampled. Further, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions and other events. Notwithstanding the above, the data obtained as part of this study is considered to be reasonably representative of environmental conditions at areas of environmental concern identified by Trow. Further, the interpretation of this data is considered to be of sufficient reliability to reasonably support the conclusions and recommendations respecting the presence of, and preferred management alternative for, contamination at the property.

Conclusions regarding the condition of the site do not represent a warranty that all areas within the site and beneath structures are of the same quality as those sampled. Further, contamination could also exist in forms not indicated by the limited investigations conducted. Additionally, the scope contained herein is based, in part, on rules and regulations that we understand to be current or expected at the time of the proposal. Changes in regulations, interpretations and/or enforcement policies may occur at any time in the future. Such changes could be reflected in the degree of remedial measures actually required at the time of the action.

We trust this report is satisfactory for your purposes. If you have any questions regarding our submission, please do not hesitate to contact this office.

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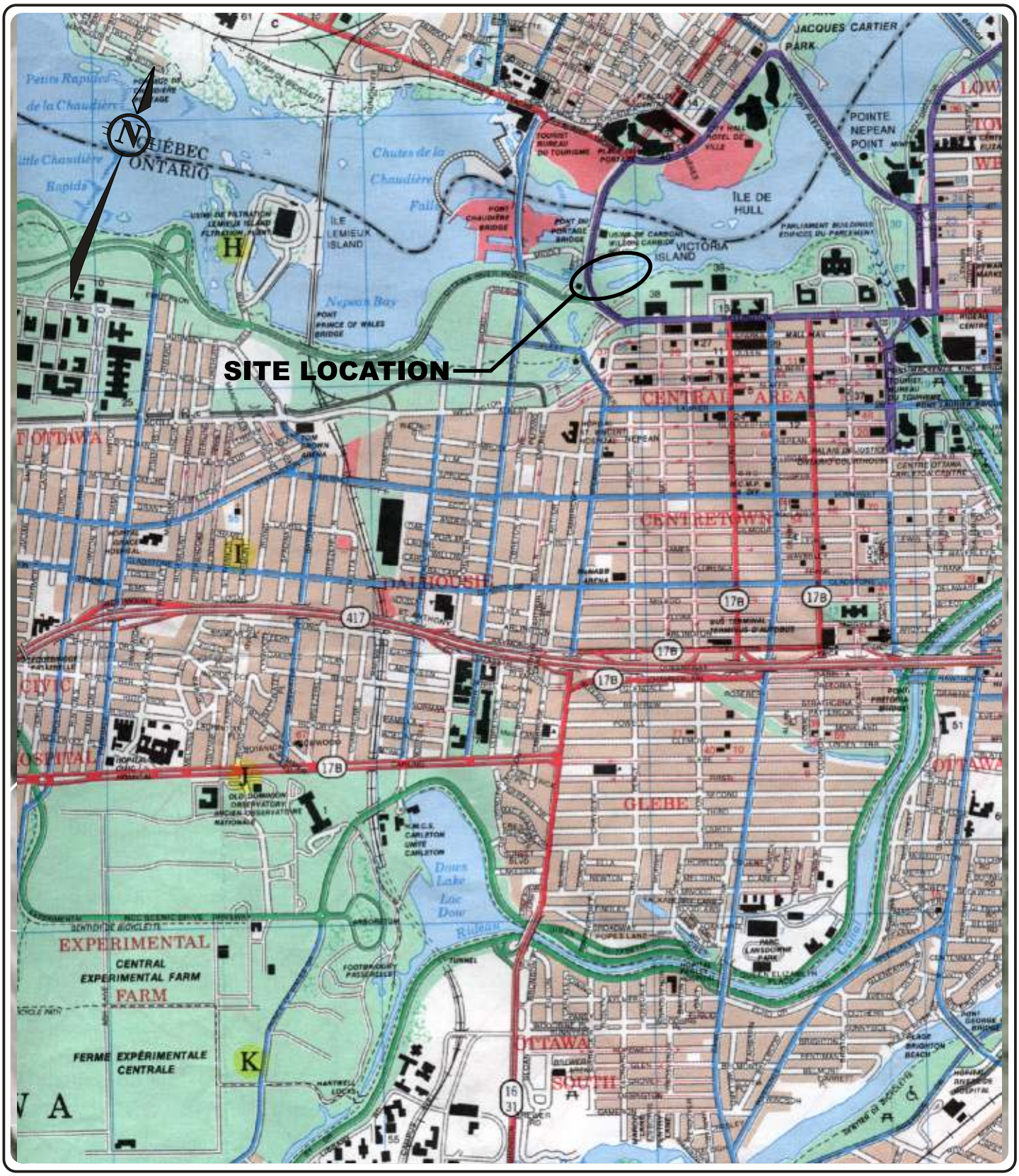
Appendix A
Figures



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DATE JULY 2009	CLIENT NCC CCN Canada		JOB No. OTEN00019406P
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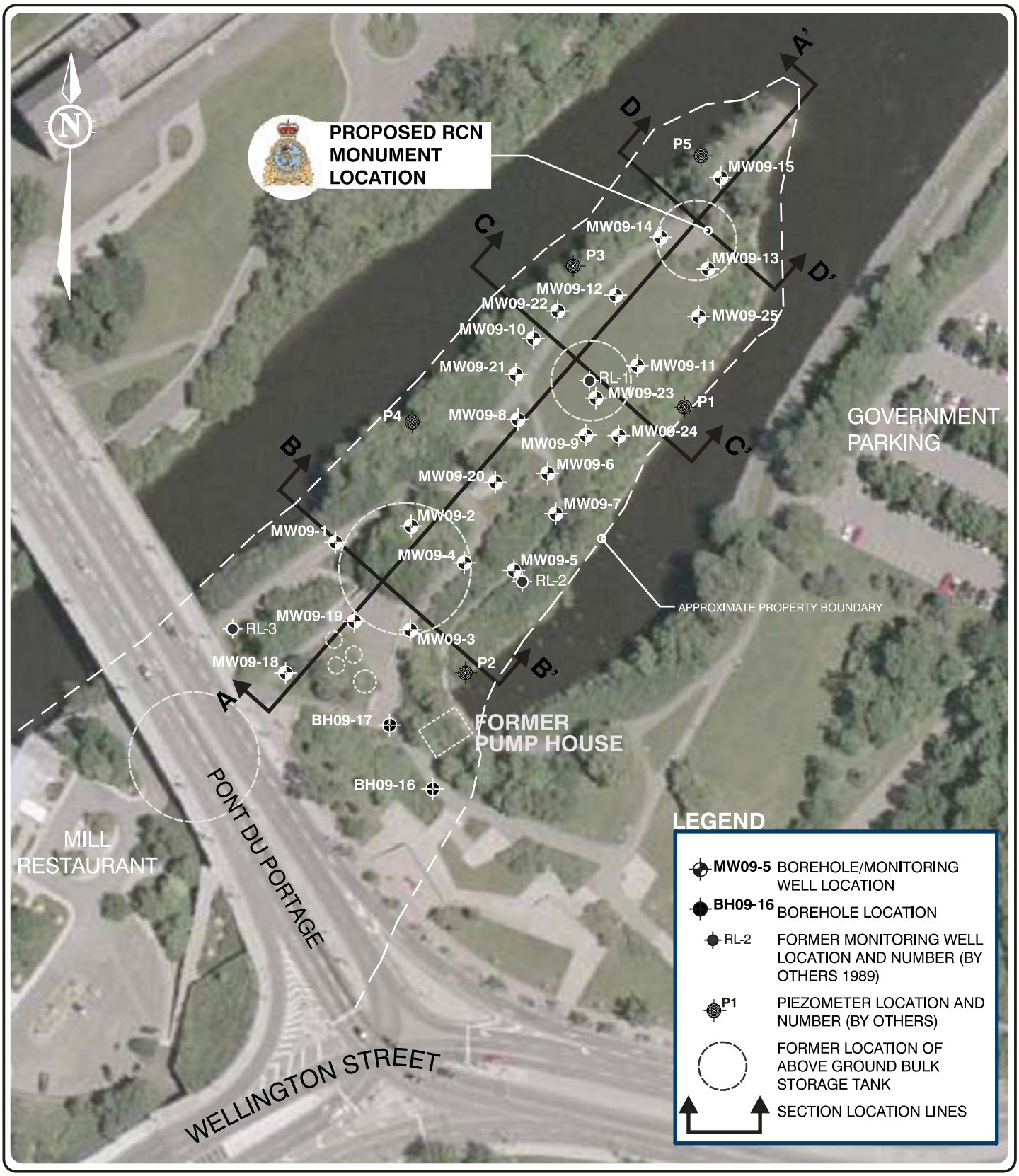

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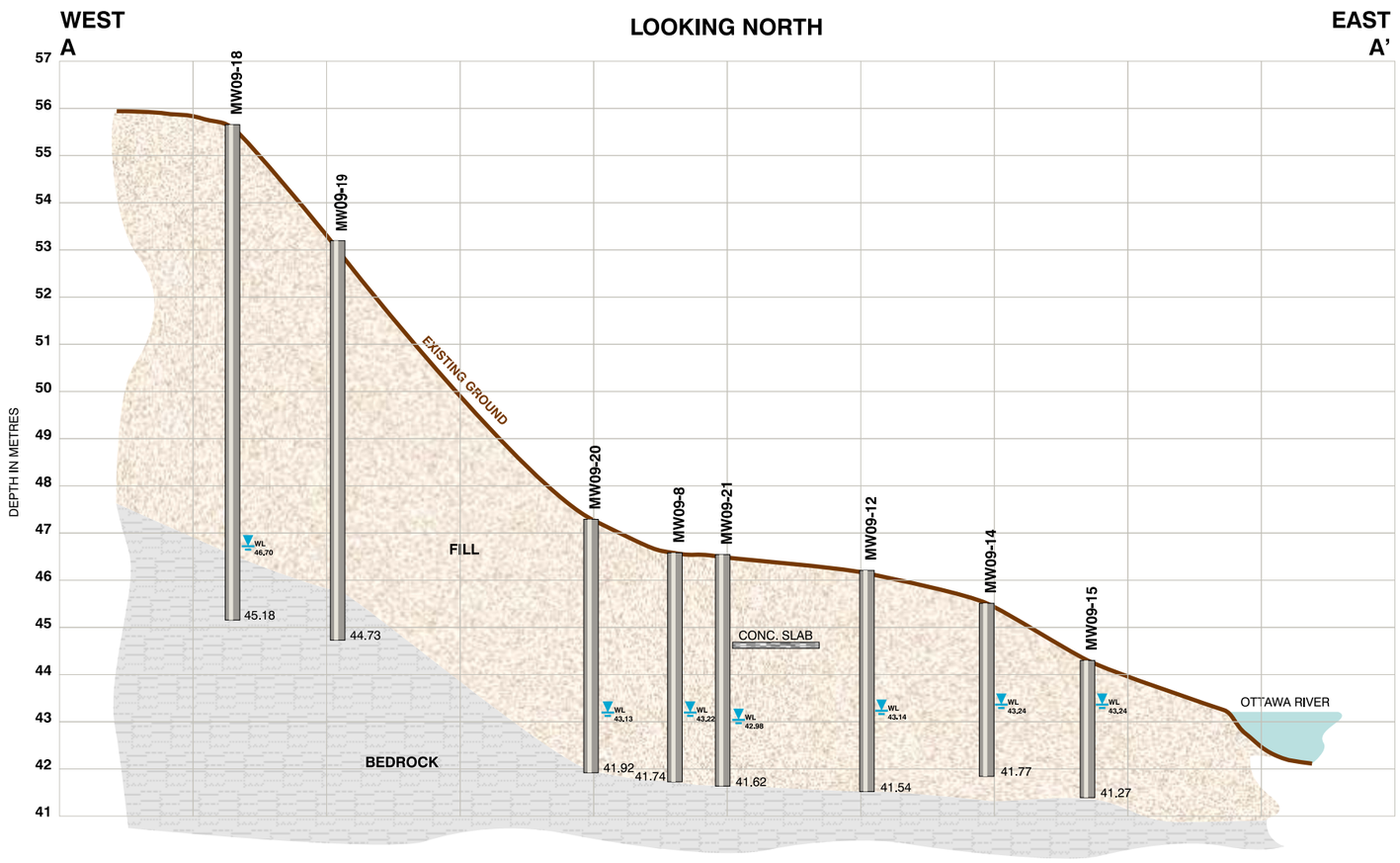
DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	BOREHOLE LOCATION PLAN RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1500±
DRAWN RG		FIG 2



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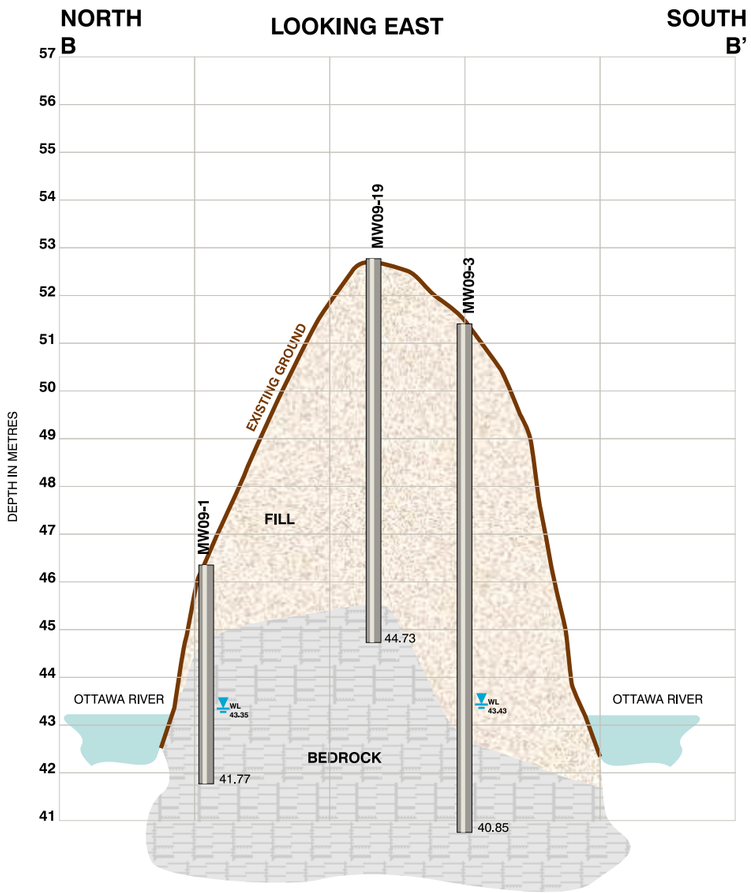
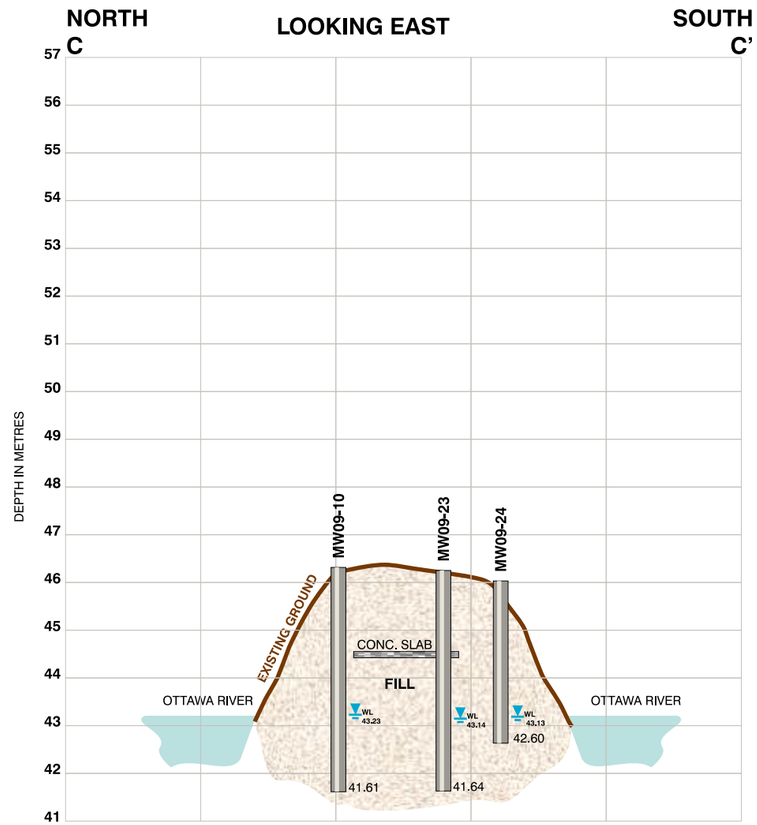
NCC CCN
Canada

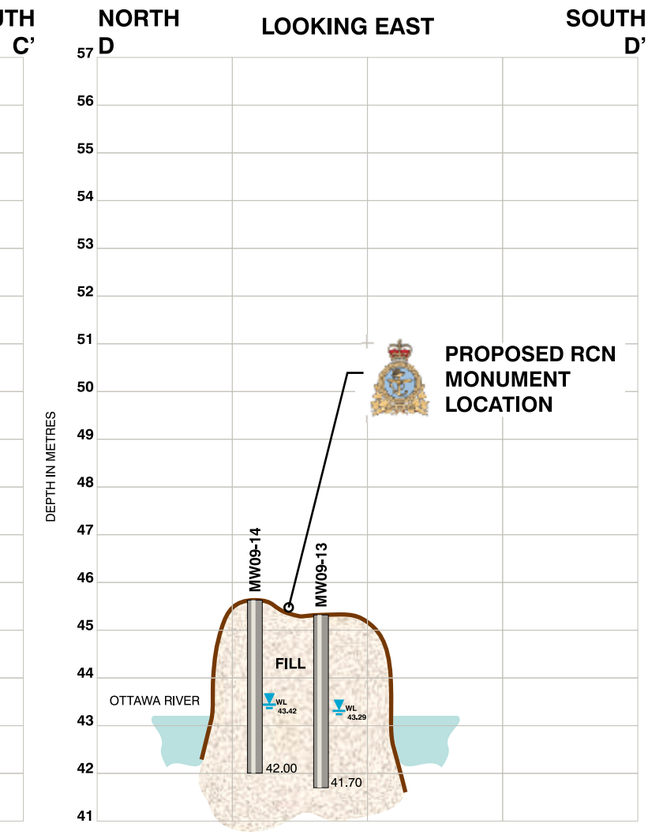
CROSS SECTION A-A'
RICHMOND LANDING, OTTAWA, ON.

DATE	JULY 2009
SCALE	VERT. 1:125
DESIGN	MGM
CHECKED	MGM
DRAWN	RG
JOB N°	OTEN00019406P

FIG 3







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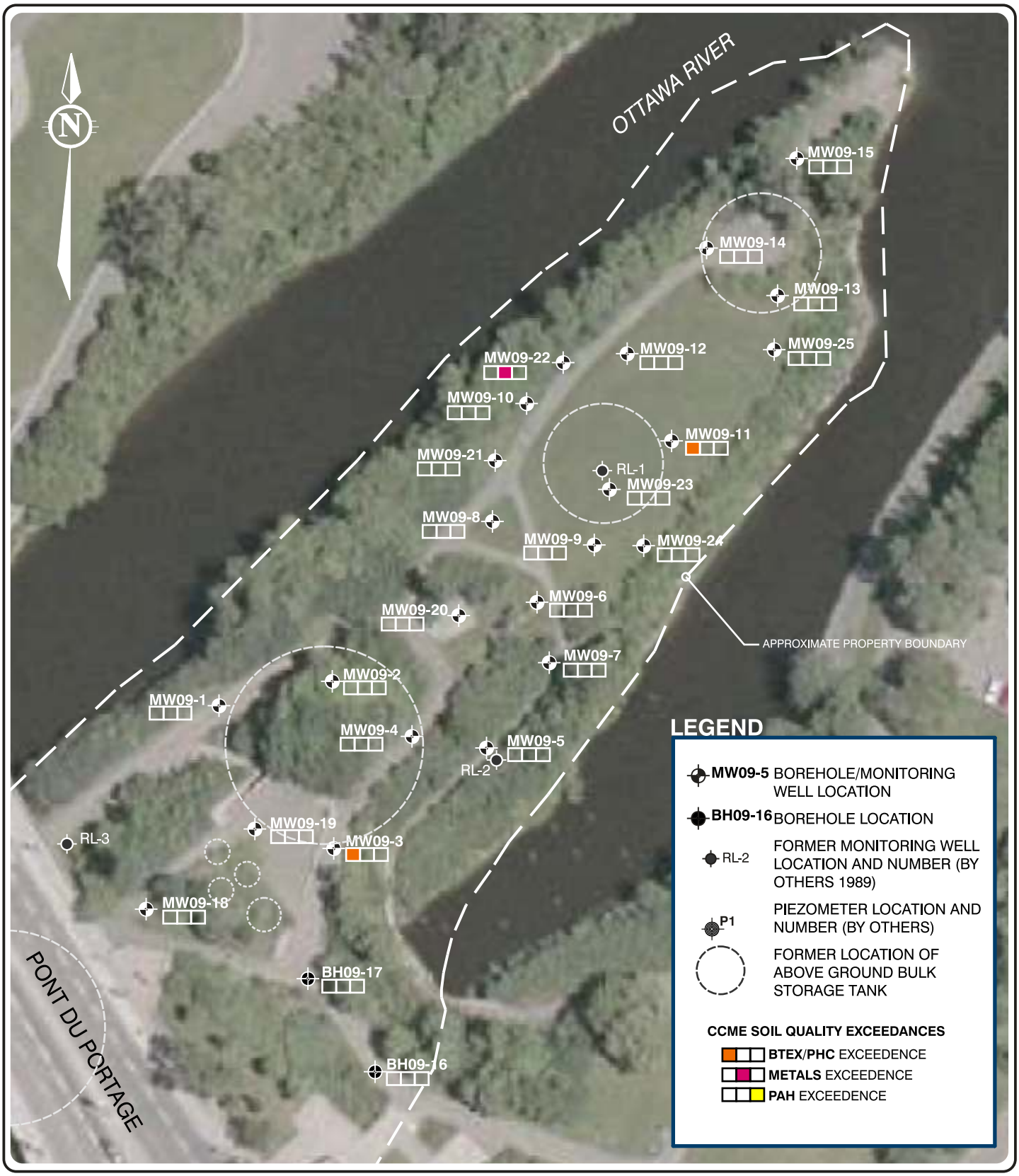
NCC CCN
Canada

CROSS SECTIONS B-B', C-C' & D-D'
RICHMOND LANDING, OTTAWA, ON.

DATE	JULY 2009
SCALE	VERT. 1:125
DESIGN	MGM
CHECKED	MGM
DRAWN	RG
JOB N°	OTEN00019406P

FIG 4



Trow Associates Inc.
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Tel: (613) 225-9940
Fax: (613) 225-7337

DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	EXCEEDENCE OF **CCME** SOIL QUALITY GUIDELINES - SURFACE (<0.6m) RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1000±
DRAWN RG		FIG 5

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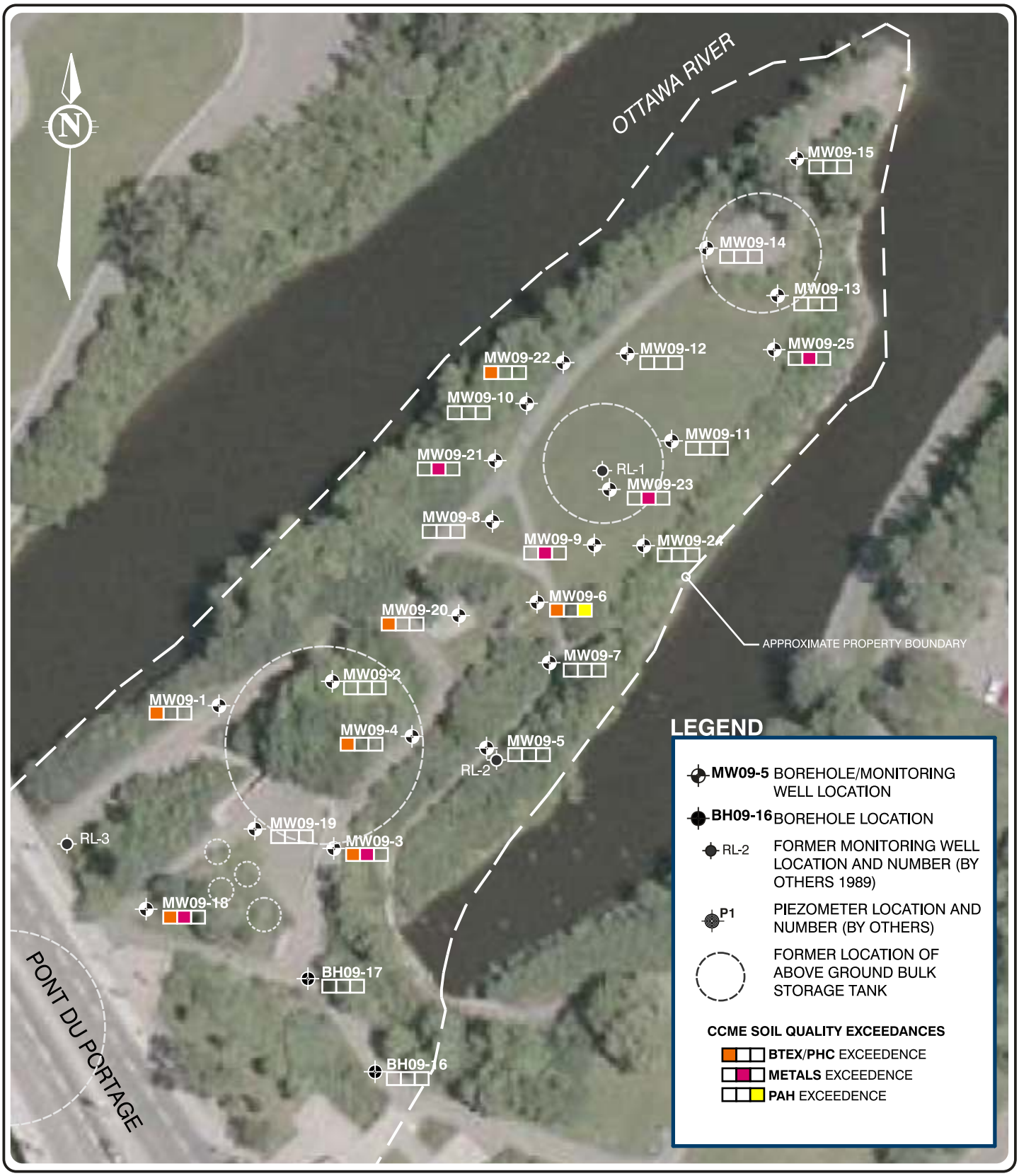
DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	EXCEEDENCE OF **MOE** TABLE 3 SOIL QUALITY GUIDELINES - SURFACE (<0.6m) RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1000±
DRAWN RG		FIG 6



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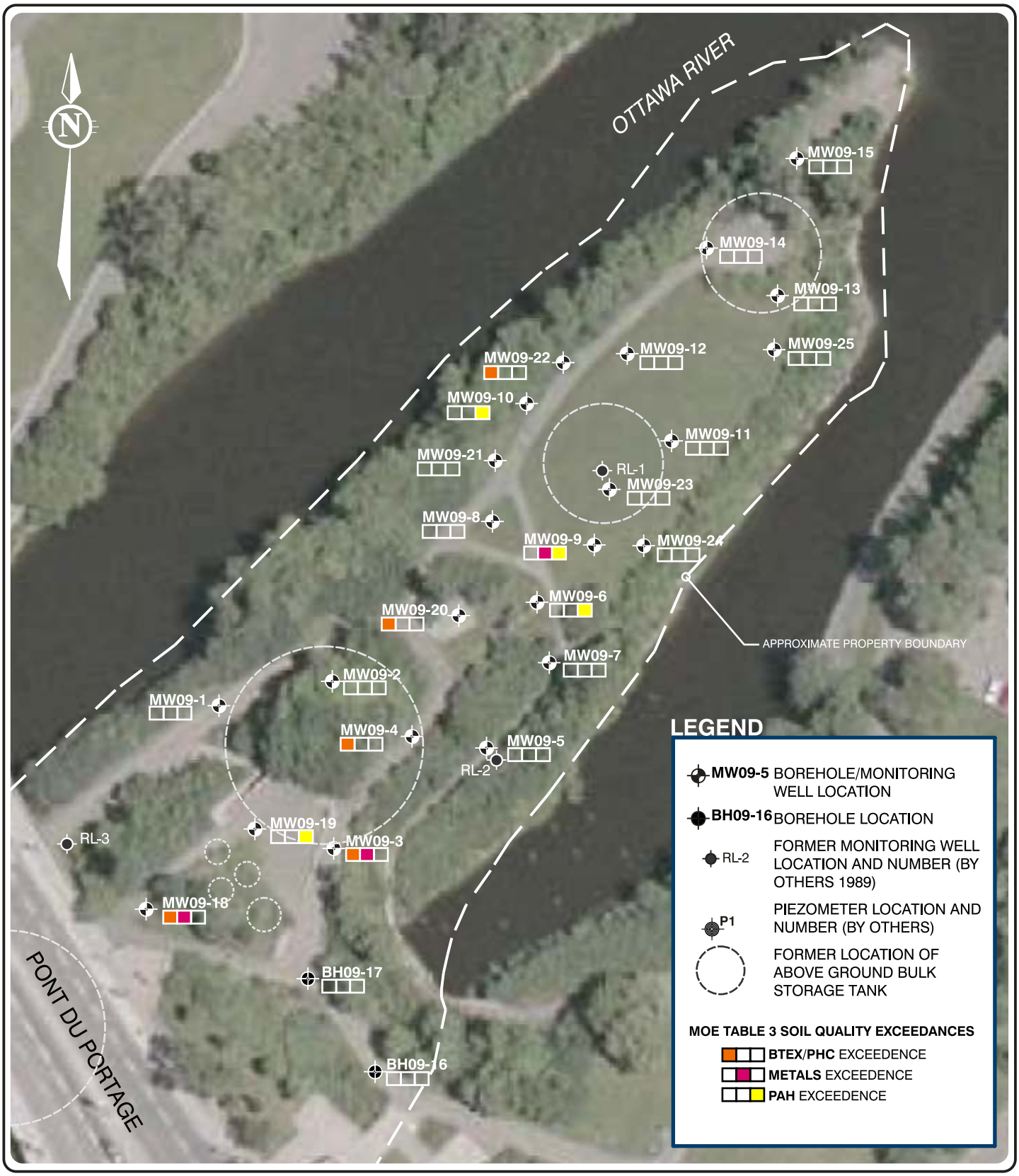
DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	EXCEEDENCE OF **CCME** SOIL QUALITY GUIDELINES - AT DEPTH (>0.6m) RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1000±
DRAWN RG		FIG 7



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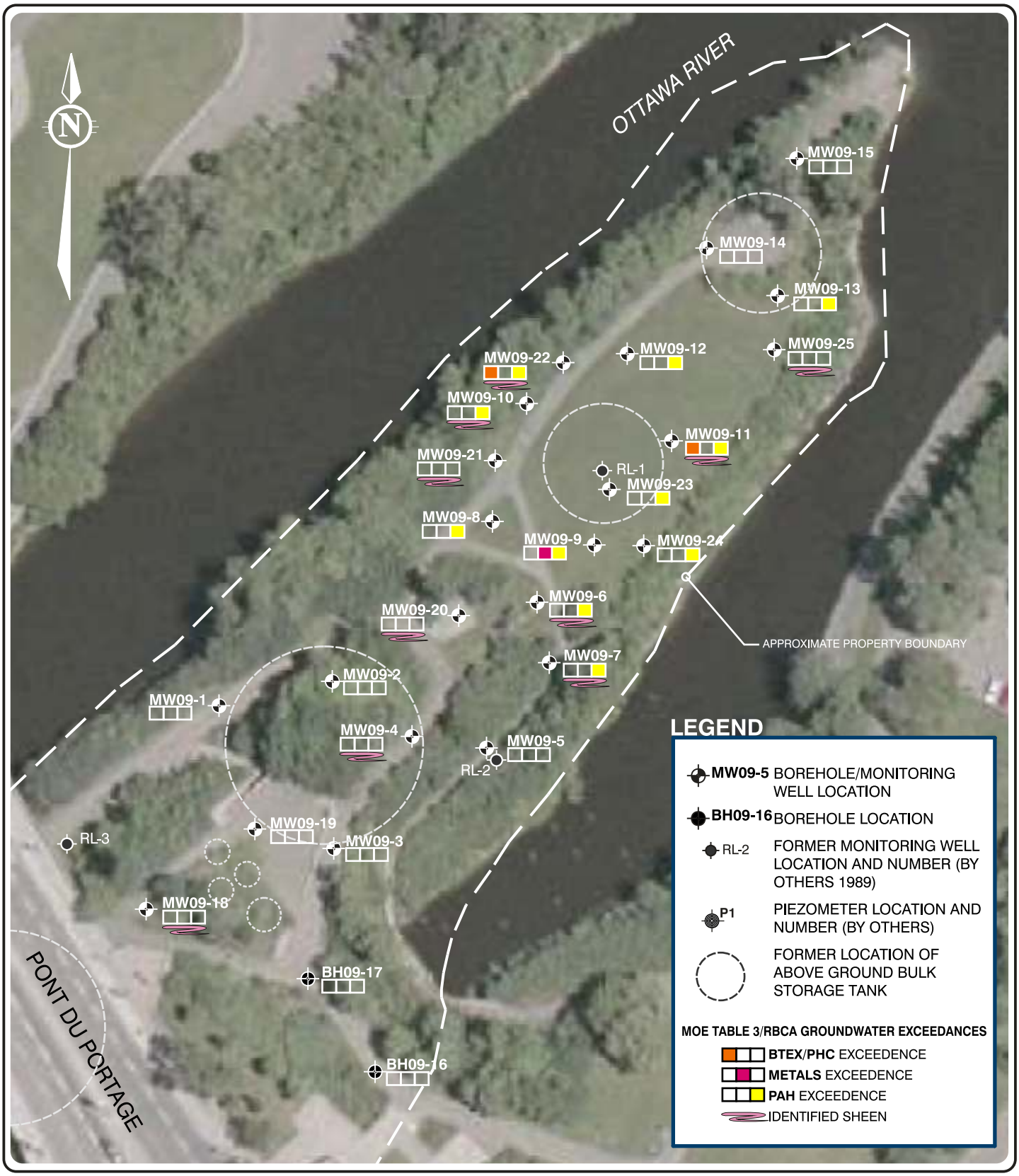
DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	EXCEEDENCE OF **MOE** TABLE 3 SOIL QUALITY GUIDELINES - AT DEPTH (>0.6m) RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1000±
DRAWN RG		FIG 8



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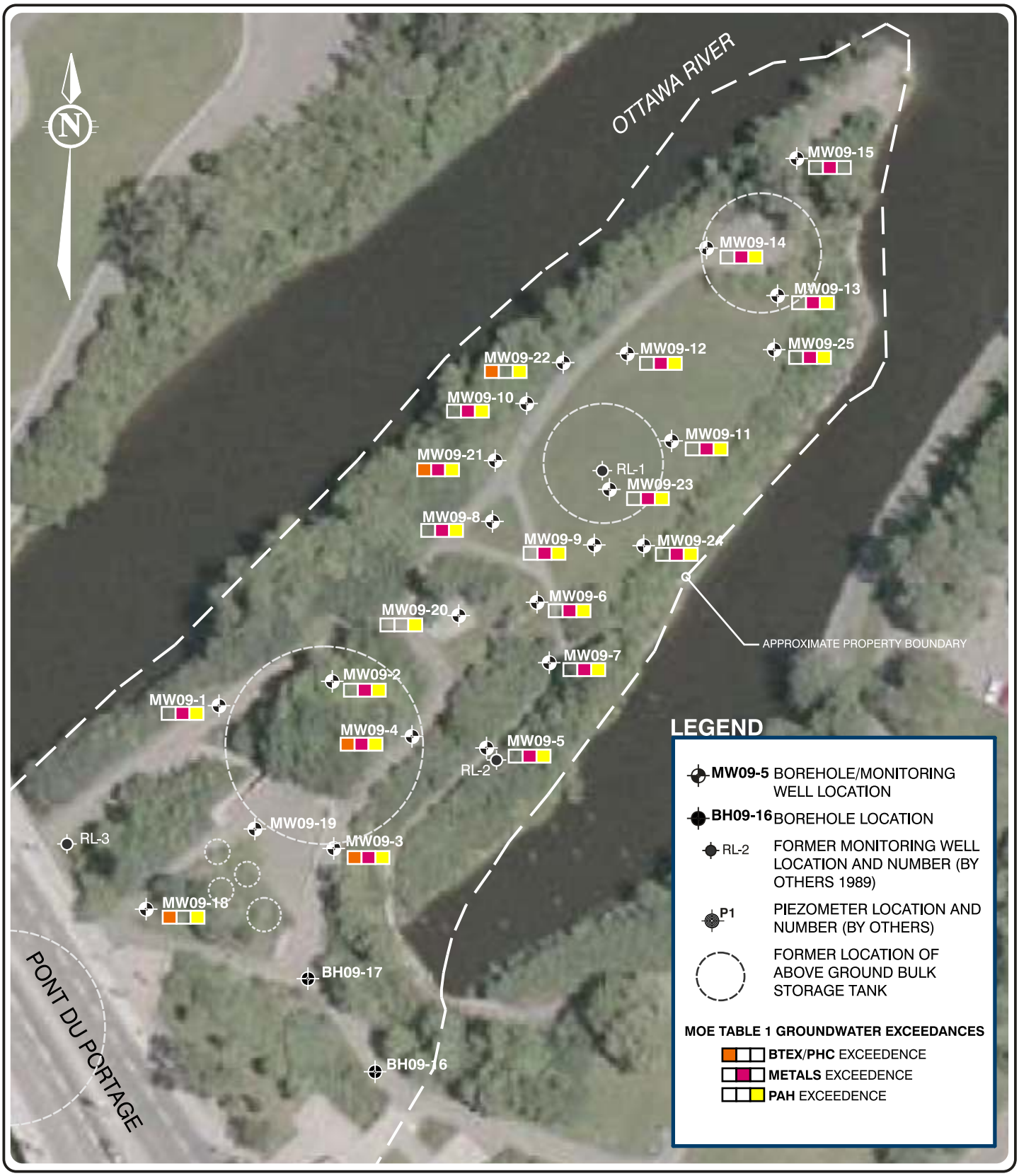
DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK	EXCEEDENCE OF **MOE TABLE 3 & RBCA** GROUNDWATER QUALITY STANDARDS RICHMOND LANDING, OTTAWA, ON.	SCALE 1:1000±
DRAWN RG		FIG 9



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DATE JULY 2009	CLIENT NCC CCN Canada	JOB No. OTEN00019406P
DESIGN MGM / CHECKED CTK		SCALE 1:1000±
DRAWN RG	EXCEEDENCE OF **MOE TABLE 1** GROUNDWATER QUALITY STANDARDS RICHMOND LANDING, OTTAWA, ON.	FIG 10

Appendix B
Borehole Logs

Borehole Log MW09-1

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 12/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		TOPSOIL	46.61	0
		FILL: silty clay, some gravel, trace cobbles and stones, dark brown, dry, no odour	46.3	
		BEDROCK: Limestone bedrock with shaley partings	45.2	1
				2
W.L. 43.54				3
				4
		AUGER REFUSAL AT 1.38m on bedrock BOREHOLE ENDED AT 4.7m	42.0	

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

Spoon refusal

SAMPLES	Sample ID
	SS1
	SS2

NOTES:

- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS2 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.07	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-2

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 12/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ⊠
Auger Sample ▥
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S
Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		TOPSOIL	46.36	0
		FILL: medium grain sand, with gravel, brown, dry, no odour	46.2	
		FILL: silty clay and gravel, dark brown, cobbles and stones, dry, no odour	45.6	1
		FILL: medium grain sand, with gravel, cobbles and stones, brown, dry, no odour	44.8	2
		FILL: cobbles and stones, some brown silty clay and gravel	44.1	
W.L. 43.71		BEDROCK: Limestone bedrock with shaly partings.	43.6	3
		Auger refusal @ 2.8m on bedrock Borehole ended @ 4.74m	41.6	4

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

SAMPLES

Sample ID	Standard Penetration Test N Value	Combustible Vapour Reading (ppm)
SS1	6	0
SS2	22	
SS3	22	0
SS4	Spoon Refusal	

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS3 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.65	
March 5, 2009	2.96	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-3

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 12/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 2

Split Spoon Sample ☒
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S
Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m
		ASPHALT	51.65
		FILL: Medium grain sand, light brown, dry, no odour	51.6
		FILL: silty clay, with gravel, dark brown, pieces of brick and mortar, dry, no odour	50.4
		FILL: Medium grain sand, some gravel, light brown, dry, no odour	50.0
		FILL: silty clay, with gravel, some cobbles, dark brown, dry, petroleum odour	48.1
		FILL: Medium grain sand, some gravel, light brown, dry, no odour	45.6
		FILL: silty clay, with gravel, some cobbles, dark brown, pieces of brick, mortar, furnace ash and fiber board, dry, petroleum odour	45.4
W.L. 43.56			
		BEDROCK: Limestone bedrock with shaly partings	42.8

DEPTH: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Standard Penetration Test N Value: 20, 40, 60, 80

Shear Strength: 50, 100, 150, 200 kPa

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES

Sample ID	SPT N	Combustible Vapour Reading (ppm)
SS1	16	0
SS2	12	5
SS3	27	0
SS4	8	0
SS5	10	5
SS6	58	0
SS7	48	0
SS8	31	20
SS9	22	5
SS10	28	

Continued Next Page

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS8 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	8.09	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-3

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Figure No. _____

Sheet No. 2 of 2

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value 20 40 60 80 / Shear Strength kPa 50 100 150 200	Combustible Vapour Reading (ppm) 250 500 750 / Natural Moisture Content % / Atterberg Limits (% Dry Weight) 10 20 30	SAMPLES	Sample ID
		BEDROCK: Limestone bedrock with shaly partings *(continued)*	18.841601098688					
			41.0					
		AUGER REFUSAL @ 9.15m BOREHOLE ENDED AT 10.68m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS8 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS		
Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	8.09	

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-4

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 9/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	◧	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m
		ASPHALT	49.56
		FILL: sandy clay and gravel, dark brown, some cobbles, pieces of brick and mortar, dry, no odour	49.5
		FILL: sand, grey, dry, no odour	46.5
		FILL: silty clay and gravel, some cobbles, brown, dry, no odour	46.3
		FILL: Medium grain sand, light brown, dry, no odour	45.2
		FILL: silty clay and gravel, some cobbles, dark brown, pieces of brick, mortar and wood, dry, no odour	44.7
W.L. 43.36		Wet, strong petroleum odour	
		BOREHOLE ENDED AT 8.24m	41.3

Standard Penetration Test N Value (20, 40, 60, 80); Shear Strength kPa (50, 100, 150, 200); Combustible Vapour Reading (ppm) (250, 500, 750); Natural Moisture Content % Atterberg Limits (% Dry Weight) (10, 20, 30)

DEPTH	SAMPLES	Sample ID	SPT N	Combustible Vapour Reading (ppm)
0		SS1	21	0
1		SS2	21	10
2		SS3	12	20
		SS4	46	25
3		SS5	38	15
4		SS6	28	0
5		SS7	16	0
		SS8	13	5
6		SS9	20	0
7				
8		SS10	17	80

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS10 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	6.2	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-5

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 6/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ☒
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

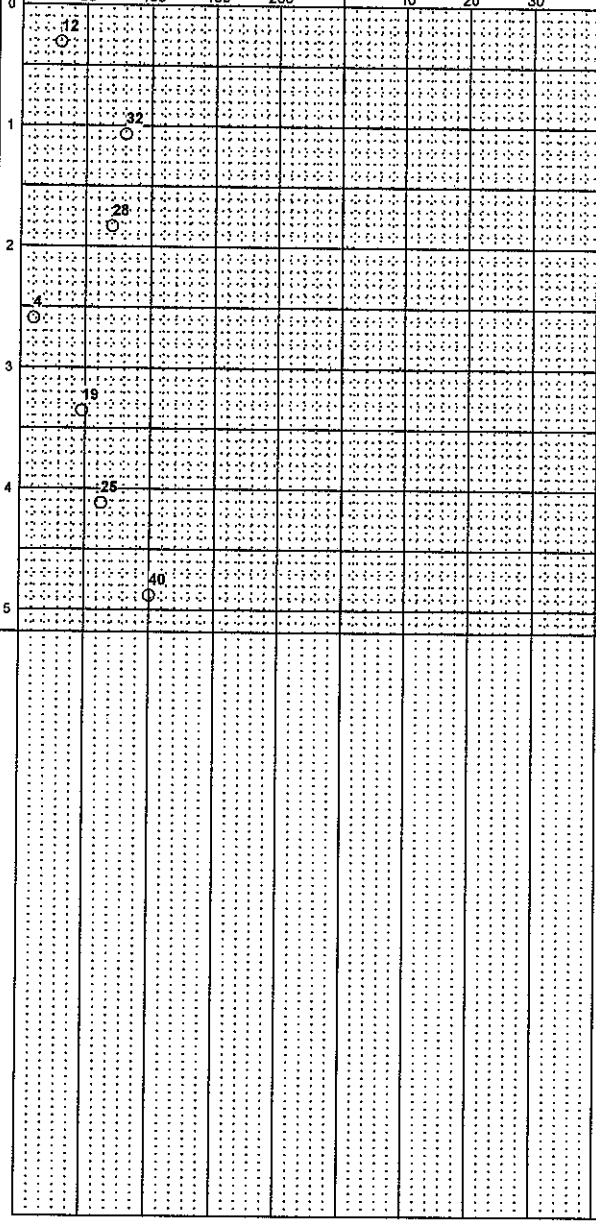
GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		ASPHALT	47.1	0
		FILL: silty sand, some gravel, brown, dry, no odour	47.0	
		FILL: silty clay, some sand and gravel and cobbles, dark brown, dry, no odour	46.5	1
		FILL: silty sand, brown, dry, no odour	45.2	2
		FILL: silty clay, with sand and gravel and cobbles, dark brown, dry, no odour	44.8	3
W.L. 43.43		Wet, wood fragments		4
		BOREHOLE ENDED AT 5.19m	41.9	5

Standard Penetration Test N Value: 20, 40, 60, 80

Shear Strength kPa: 50, 100, 150, 200

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30



SAMPLES	Sample ID
	SS1
	SS2
	SS3
	SS4
	SS5
	SS6
	SS7

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS5 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.67	
March 5, 2009	3.79	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-6

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 6/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊙
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		TOPSOIL	47.09	0
		FILL: silty sand, some clay and gravel, brown, dry, no odour	47.0	
		FILL: sand, coarse grained, pieces of furnace ash, brown, dry, no odour	45.8	1
		FILL: silty sand, some clay and gravel, pieces of brick and wood, brown, dry, no odour	45.6	2
		Compacted black silty sand	W.L. 43.4	3
		Wet, cobbles and boulders		4
		BOREHOLE ENDED AT 5.19m	41.9	5

Standard Penetration Test N Value: 20, 40, 60, 80

Shear Strength: 50, 100, 150, 200 kPa

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES	Sample ID	SPT N	Combustible Vapour Reading (ppm)
	SS1	9	25
	SS2	9	
	SS3	8	
	SS4	7	15
	SS5	61	
	SS6	21	
	SS7	8	

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS2 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.69	
March 5, 2009	3.78	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-7

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 6/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ☒
Auger Sample ▥
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) 250 500 750 / Natural Moisture Content % / Atterberg Limits (% Dry Weight) 10 20 30	SAMPLES	Sample ID
		TOPSOIL	46.57	0				
		FILL: silty sand and gravel, trace clay, some cobbles and boulders, dark brown, pieces of brick, dry, no odour	46.4		24			SS1
				1	9			SS2
				2	15			SS3
					24			SS4
▼		Wet	W.L. 43.35	3	13			SS5
				4	6			SS6
			42.0					
		BOREHOLE ENDED AT 4.58m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS4 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.22	
March 5, 2009	3.33	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-8

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 9/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +
Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊙
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		TOPSOIL	46.87	0				
		FILL: silty clay, some sand and gravel, cobbles, brown, dry, no odour	46.6		30	5		SS1
		Brick, mortar, furnace ash and wood fragments		1	47	0		SS2
				2	22	0		SS3
					34	10		SS4
W.L. 43.47				3	Spoon refusal			SS5
		Wet, slight petroleum odour		4	45	5		SS6
		Wood, no soil, slight petroleum odour	42.0		Spoon refusal	55		SS7
		BOREHOLE ENDED AT 4.88m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS6 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.4	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-9

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 7/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		FILL: silty sand with clay and gravel, brown, dry, no odour	46.5	0	12	0		SS1
		Large pieces of brick and black furnace ash material		1	32	0		SS2
				2	19	0		SS3
					3			SS4
		FILL: cobbles and boulders Wet	43.6	3	13			SS5
			W.L. 43.34	4	13			SS6
		BOREHOLE ENDED AT 4.58m	41.9					

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS3 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	3.16	
March 5, 2009	3.26	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-10

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 9/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ☒
Auger Sample ▥
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—○
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Sample ID
		TOPSOIL	46.46	0	
		FILL: silty clay with gravel, some sand, cobbles, brown, dry, no odour	46.3		SS1
		Brick, mortar, furnace ash and wood fragments		1	SS2
			45.1		
				2	SS3
					SS4
		Wet	W.L. 43.51	3	SS5
		Wet, pieces of wood, petroleum odour		4	SS6
			42.0		
		BOREHOLE ENDED AT 4.58m	41.9		

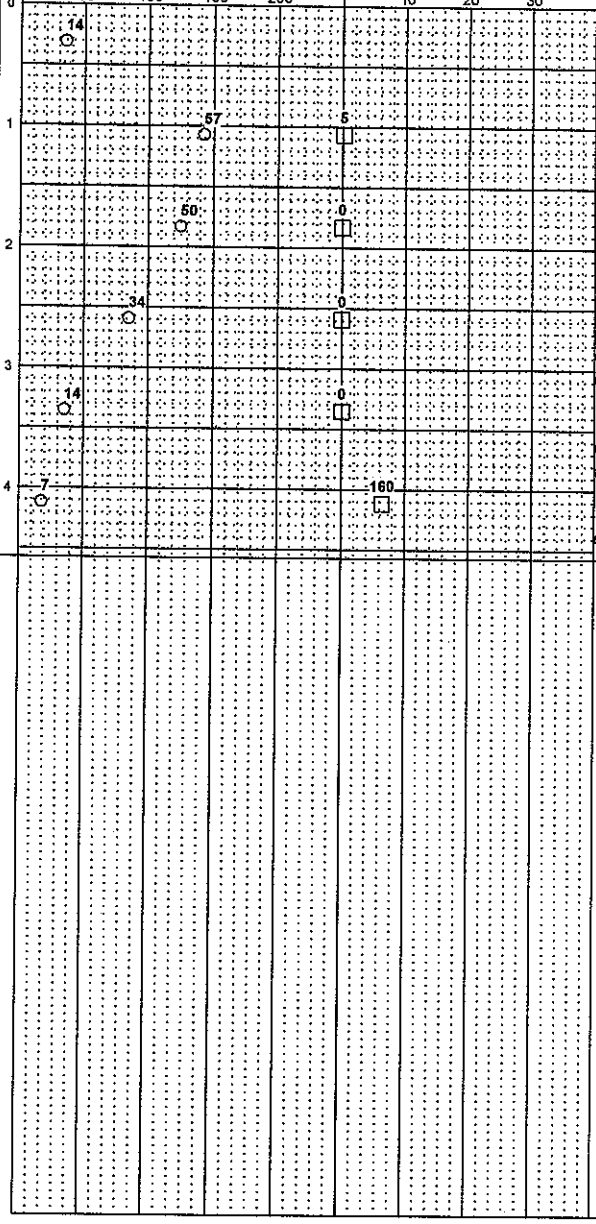
Standard Penetration Test N Value: 20, 40, 60, 80

Shear Strength kPa: 50, 100, 150, 200

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES



NOTES:

- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS2 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
- A blind duplicate was submitted for the same analysis
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.95	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-11

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 7/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ☒
Auger Sample ▥
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) 250 500 750 / Natural Moisture Content % Atterberg Limits (% Dry Weight) 10 20 30	SAMPLES	Sample ID
		TOPSOIL	46.16	0				
		FILL: silty sand, with gravel and cobbles, brown, dry, no odour	46.0		25			SS1
				1	50			SS2
				2	20			SS3
			W.L. 43.39		19			SS4
		Wet		3	27			SS5
		FILL: sandy clay, some gravel and cobbles, dark brown, wet, no odour	42.3	4	12	0		SS6
		BOREHOLE ENDED AT 4.58m	41.6					

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS2 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.77	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-12

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 8/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test
Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		TOPSOIL	47.19	0				
		FILL: silty sand, some clay, gravel and cobbles, brown, dry, no odour	47.0		16	35		SS1
				1	48	35		SS2
					14	25		SS3
		FILL: Coarse grain sand, brown	45.1	2				
		FILL: silty sand, gravel and cobbles, brown, dry, no odour	44.9		12	15		SS4
		Wet	W.L. 44.32	3	14			SS5
				4	18	45		SS6
		Large piece of wood, stained black, strong petroleum odour	42.6					
		BOREHOLE ENDED AT 4.58m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS6 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.87	
March 5, 2009	2.97	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-13

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Figure No. _____

Sheet No. 1 of 1

Date Drilled: 8/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength (50 100 150 200 kPa)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		TOPSOIL	45.33	0				
		FILL: silty sand, some clay and gravel, brown, dry, no odour	45.2		35			SS1
				1	15	35		SS2
			43.8					
		FILL: silty sand and furnace coal, some cobbles, black, compacted, dry, no odour			13			SS3
			43.2	2	W.L. 43.32			
		FILL: silty clay, gravel and cobbles, brown, wet, no odour			8	10		SS4
		Petroleum odour		3	12	35		SS5
			41.7					
		BOREHOLE ENDED AT 3.66m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS5 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.01	
March 5, 2009	2.11	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-14

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 8/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ⊠
Auger Sample
SPT (N) Value ○
Dynamic Cone Test
Shelby Tube ■
Shear Strength by Vane Test +S
Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		ASPHALT	45.64	0
		FILL: silty sand and gravel, brown, pieces of brick and ash, dry, no odour	45.6	
		FILL: silty clay, some sand and gravel, dry, no odour	45.0	1
		FILL: silty sand and gravel, some cobbles, brown, wet, no odour	43.6	2
			W.L. 43.45	
			42.0	3
		BOREHOLE ENDED AT 3.66m		

Standard Penetration Test N Value: 20, 40, 60, 80
Shear Strength kPa: 50, 100, 150, 200
Combustible Vapour Reading (ppm): 250, 500, 750
Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES	Sample ID	Shear Strength (kPa)	Natural Moisture Content %
	SS1	76	30
	SS2	50	56
	SS3	16	60
	SS4	24	5
	SS5	7	20

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS3 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
- A blind duplicate was submitted for the same analysis
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	2.19	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-15

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 8/1/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: KML Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▯▯	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		FILL: silty sand and gravel, brown, cobbles, dry, no odour	44.4	0		945		SS1
W.L. 43.32				1	25	20		SS2
		Wet		2	8	15		SS3
		FILL: sand, medium to coarse grain, some gravel, wet, no odour	42.1		16	35		SS4
		BOREHOLE ENDED AT 3.05m	41.4	3				

NOTES:

- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- SS1 and SS4 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
- A blind duplicate was submitted for the same analysis

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
January 21, 2009	1.08	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log BH09-16

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Figure No. _____

Sheet No. 1 of 1

Date Drilled: 23/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	◧	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		ASPHALT	54.54	0				
		FILL: sand and gravel, brown/grey, dry, no odour	54.4			5		S1
				1		5		S2
		FILL: sand, light brown, dry, no odour	53.3			10		S3
				2		5		S4
		BOREHOLE ENDED AT 2.43 M	52.1					

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S3 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS		
Water Level Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Borehole Log BH09-17

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 23/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	◧	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		ASPHALT	52.57	0				
		FILL: sand and gravel, brown/grey, dry, no odour some brick fragments	52.4	1		5 10 5		S1 S2 S3
		FILL: sand, light brown, dry, no odour	50.7	2		5		S4
		BOREHOLE ENDED AT 2.43 M	50.1					

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S2 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-18

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 23/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 2

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊙
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Sample ID
		ASPHALT	55.51	0	
		FILL: sand and gravel, grey, dry, no odour	55.4		S1
		FILL: sand and gravel, grey, dry, no odour	54.7	1	S2, S3, S4
		FILL: sand, golden brown, dry, no odour	52.6	2, 3	S5, S6, S7
		FILL: sand with trace clay and gravel, some coal fragments, grey, dry, no odour	49.6	4, 5	S8, S9
		FILL: sand and gravel, some coal fragments, dark grey, dry, petroleum odour	48.8	6, 7	S10, S11
W.L. 46.83		no coal fragments, slight petroleum odour	46.5	8	S12
		BEDROCK		9, 10	

Standard Penetration Test N Value: 20 40 60 80

Shear Strength: 50 100 150 200 kPa

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

Measured values: 0, 0, 5, 0, 5, 0, 0, 5, 10, 50, 70, 40

Continued Next Page

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S10 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	8.68	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-18

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Figure No. _____

Sheet No. 2 of 2

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH m	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
			22.7016010498688	0				
			45.3					
		BOREHOLE ENDED AT 10.2m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S10 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	8.68	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-19

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 24/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

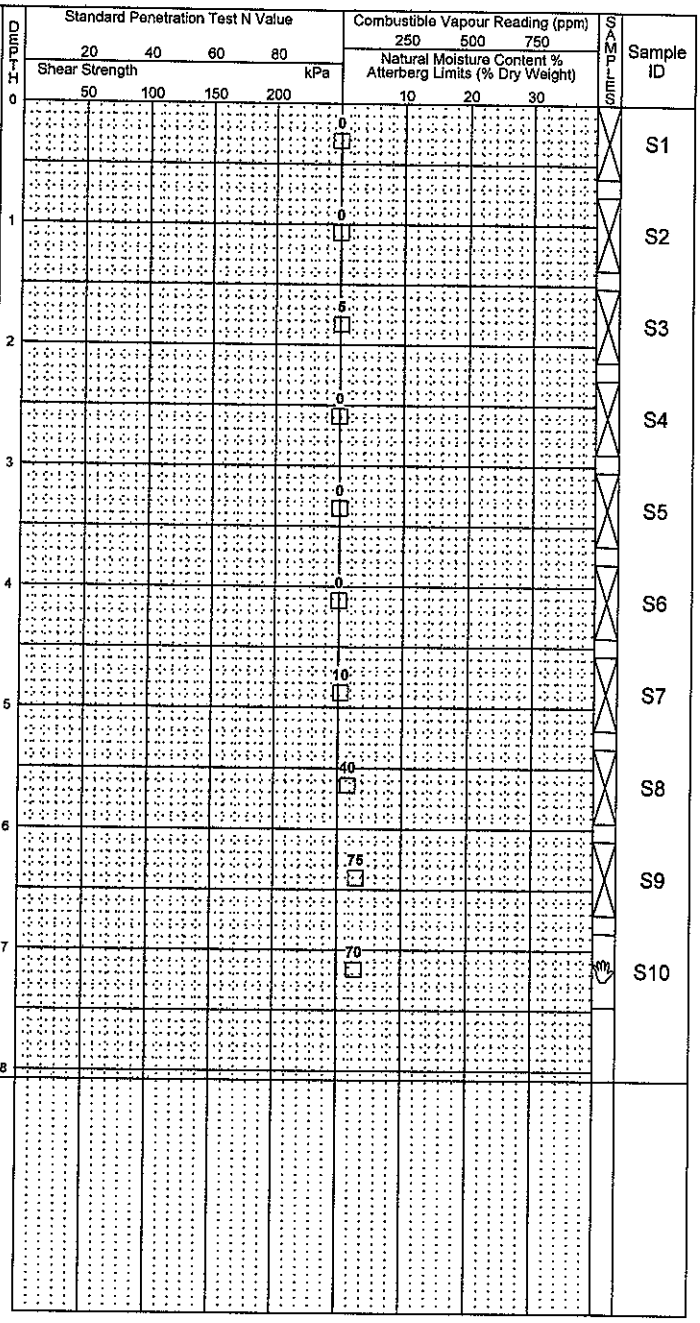
Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m
		FILL: sand and gravel with trace clay and brick fragments, light brown, dry, no odour	52.86
		coal fragments	
		FILL: sand, light brown, dry, no odour	50.7
		FILL: sand and gravel with fragments of brick,coal and wood, dark grey, no odour	48.9
		no debris	
		petroleum odour	
		fragments of brick and glass, petroleum odour	46.0
		FILL: sand and gravel with trace clay, dark grey, slight petroleum odour	45.7
		BEDROCK	
		BOREHOLE ENDED AT 8.08m	44.8



NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S9 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS		
Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	dry	

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-20

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 24/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample ☒
Auger Sample ▥
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢—○
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (10 20 30)	SAMPLES	Sample ID
		FILL: sand and gravel, grey, dry, no odour	47.23	0		0		S1
		brick fragments		1		5		S2
				2		0		S3
		green plastic/glass and brick fragments, petroleum odour				20		S4
				3		40		S5
		FILL: gravel with cobbles, grey, wet, petroleum odour	43.6	4		30		S6
			W.L. 43.26			40		S7
			42.0	5				
		BOREHOLE ENDED AT 5.18m						

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S7 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
- A blind duplicate was submitted for the same analysis
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	3.97	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-21

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 25/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		FILL: sand and gravel, brown, dry, no odour	46.59	0
		medium grey		1
		FILL: silty clay with wood fragments, grey, moist, no odour	45.2	
		FILL: sand and gravel with brick fragments, moist, no odour	44.8	2
		FILL: rock fragments, grey, moist, no odour	43.5	3
		FILL: silty fine sand with some rock fragements, dark brown, no odour	42.9 W.L. 43.07	4
		AUGER REFUSAL, BOREHOLE ENDED AT 4.88m	41.7	

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

SAMPLES	Sample ID
⊠	S1
⊠	S2
⊠	S3
⊠	S4
⊠	S5
⊠	S6
⊠	S7

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S7 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	3.52	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-22

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 25/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH
		FILL: sand and gravel, brown, moist, no odour	46.05	0
		trace clay and brick fragments		1, 2
▼			W.L. 43.23	
		FILL: sand and gravel, grey, wet, no odour	43.0	3
		FILL: sand with gravel and organics, wet, petroleum odour	42.4	4
		BOREHOLE ENDED AT 4.57m	41.5	

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

SAMPLES	Sample ID
X	S1
X	S2
X	S3
X	S4
X	S5
X	S6

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S6 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	2.82	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-23

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 26/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	◫	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Sample ID
		FILL: sand and gravel with brick fragments, brown, moist, no odour	46.34	0	S1
				1	S2
		CONCRETE: slab	44.6 / 44.5		
		FILL: sand and gravel with brick fragments, grey, moist, no odour		2	S3
					S4
		FILL: silty sand with gravel and brick and wood fragments, wet, no odour	43.3 W.L. 43.27	3	S5
				4	S6
		BOREHOLE ENDED AT 4.57m	41.8		

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

SAMPLES

NOTES:

- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S6 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS		
Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	3.07	

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-24

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 25/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊖
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Standard Penetration Test N Value 20 40 60 80 / Shear Strength kPa 50 100 150 200	Combustible Vapour Reading (ppm) 250 500 750 / Natural Moisture Content % Atterberg Limits (% Dry Weight) 10 20 30	SAMPLES	Sample ID
		FILL: sand with gravel, brown, moist, no odour	46.04	0				S1
		brick fragments		1				S2
		metal wire		2				S3
		FILL: rock fragments with trace sand and gravel, grey, moist, no odour	43.8					S4
		wet	W.L. 43.22	3				S5
		BOREHOLE ENDED AT 3.35m	42.7					

NOTES:
- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S3 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	2.82	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Borehole Log MW09-25

Trow

Project No. OTEN00019406P

Project: Phase II Environmental Site Assessment

Location: Richmond Landing, Ottawa, Ontario

Date Drilled: 25/2/09

Drill Type: Hollow Stem Auger, Track Mount

Datum: Gedetic

Logged by: DMK Checked by: MGM

Figure No. _____

Sheet No. 1 of 1

Split Spoon Sample	⊠	Combustible Vapour Reading	□
Auger Sample	▥	Natural Moisture Content	×
SPT (N) Value	○	Atterberg Limits	⊢—⊙
Dynamic Cone Test	——	Undrained Triaxial at % Strain at Failure	⊕
Shelby Tube	■	Shear Strength by Penetrometer Test	▲
Shear Strength by Vane Test	+ S		

GWL	SYMBOL	SOIL DESCRIPTION	Assumed Elevation m	DEPTH	Sample ID
		FILL: sand and gravel, brown, moist, no odour	45.67	0	S1
		FILL: silty sand with brick fragments, grey, moist, slight petroleum odour	45.1	1	S2
		FILL: rock fragments with sand and gravel, brown/grey, moist-wet, no odour	44.1	2	S3
W.L. 43.25		FILL: rock fragments, grey, wet, no odour	43.4		S4
		FILL: silty sand with gravel, dark grey, wet, slight petroleum odour	42.8	3	S5
		FILL: silty sand with wood fragments, dark brown, wet, slight petroleum odour	42.0	4	S6
		BOREHOLE ENDED AT 4.57m	41.1		

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

SAMPLING

NOTES:

- Borehole data requires interpretation assistance from Trow before use by others
- This Drawing to be read with Trow Associates Inc. report OTEN00019406P
- S1 and S6 were submitted for analysis of PHC (F1-F4), PAH, metals, PCBs and VOC
-
-

WATER LEVEL RECORDS

Water Level Date	Water Level (m)	Hole Open To (m)
March 5, 2009	2.42	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Appendix C
Analytical Summary Tables

Table 1 - Soil Analytical Results - Leachate Parameters
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID Sample Date		Composite 8-Jan-09	Composite 25-Feb-09
Parameter	**Assessment [1] Criteria**		
Leachate mg/L			
Cyanide, Free	20	<0.002	<0.002
Fluoride	150	0.16	0.18
Arsenic	2.5	<0.05	<0.05
Barium	100	1.27	0.51
Nitrate	1000	<1	<1
Nitrite		2	<1
Boron	500	<0.05	<0.05
Cadmium	0.5	<0.01	<0.01
Chromium	5	<0.05	<0.05
Lead	5	<0.05	<0.05
Selenium	1	<0.05	<0.05
Silver	5	<0.05	<0.05
Uranium	10	<0.05	<0.05
Mercury	0.1	<0.005	<0.005
PCBs		<0.003	<0.003
Benzo(a)pyrene	0.001	<0.0001	<0.0001
Initial pH		9.35	9.47
Final pH		6.11	6.15
Benzene	0.5	<0.0005	<0.0005
Carbon Tetrachloride	0.5	<0.0005	<0.0005
Chlorobenzene	8	<0.0004	<0.0004
Chloroform	10	<0.0006	<0.0006
1,2-Dichlorobenzene	20	<0.0004	<0.0004
1,4-Dichlorobenzene	0.5	<0.0004	<0.0004
1,2-Dichloroethane	0.5	<0.0005	<0.0005
1,1-Dichloroethylene	1.4	<0.0006	<0.0006
Methyl Ethyl Ketone (2-Butanone)	200	<0.03	<0.03
Methylene Chloride	5	<0.004	<0.004
Tetrachloroethylene	3	<0.0005	<0.0005
Trichloroethylene	5	<0.0004	<0.0004
Vinyl chloride	0.2	<0.0005	<0.0005
Soil (µg/g)			
Total Petroleum Hydrocarbons (gas)	nv	<50	<10
Total Petroleum Hydrocarbons (diesel)	nv	86	76
Flashpoint (°C)	< 65	>70	>70

Notes:
1 - Ontario Ministry of the Environmental Ontario Regulation 558/00 Schedule 4 - Leachate Toxic Criteria
nv - no value established

Table 2a - Surface Soil (≤ 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS1**	**MW09-2 SS1**	**MW09-3 SS1**	**MW09-4 SS1**	**MW09-5 SS1**	**MW09-6 SS1**	**MW09-7 SS1**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1 [3]**	**MOE Criteria Table 3 [4]**							
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	<10	<10	10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	<10	<10	344	86	229	<10	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	<10	739	120	191	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2a - Surface Soil (≤ 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-8 SS1**	**MW09-9 SS1**	**MW09-10 SS1**	**MW09-10 SS100**	**MW09-11 SS1**	**MW09-12 SS1**	**MW09-13 SS1**
Sample Date				09-Jan-09	07-Jan-09	09-Jan-09	09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1 [3]**	**MOE Criteria Table 3 [4]**				**Dup of MW09-10 SS1**			
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	0.02	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	0.01	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	0.223	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	21	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	20	75	<10	15	**362**	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	294	142	138	228	111	242	91
F_4 (C_{34}-C_{50})	2800	NV	2800	149	10	287	718	21	45	<10

Notes:

1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil

2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.

3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004

4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004

Shaded values exceed Federal Criteria

Underline - concentration exceeds MOE Table 1 criteria

Bold - concentration exceeds MOE Table 3 criteria

NV - no value

Table 2a - Surface Soil (≤ 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-14 SS1**	**MW09-14 SS100**	**MW09-15 SS1**	**MW09-15 SS100**	**BH09-16 SS1**	**BH09-17 SS1**	**MW09-18 SS1**
Sample Date				08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	25-Feb-09	25-Feb-09	25-Feb-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1 [3]**	**MOE Criteria Table 3 [4]**		**Dup of MW09-14 SS1**		**Dup of MW09-15 SS1**			
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	10	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	51	140	143	<10	<10	<10	21
F_4 (C_{34}-C_{50})	2800	NV	2800	37	171	76	<10	<10	<10	10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2a - Surface Soil (≤ 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-19 SS1**	**MW09-20 SS1**	**MW09-20 SS10**	**MW09-21 SS1**	**MW09-22 SS1**	**MW09-23 SS1**	**MW09-24 SS1**	**MW09-25 SS1**
Sample Date				25-Feb-09	25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1 [3]**	**MOE Criteria Table 3 [4]**			**Dup of MW09-20 SS1**					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	21	19	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	<10	161	106	<10	93	81	119	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	108	80	<10	104	86	289	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2b - Soil at Depth (> 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS2**	**MW09-2 SS3**	**MW09-3 SS8**	**MW09-4 SS10**	**MW09-5 SS5**	**MW09-6 SS2**	**MW09-7 SS4**	**MW09-8 SS6**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09
Sample Depth (m)				0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	3.8 - 4.4	0.8 - 1.4	2.3 - 2.9	3.8 - 4.4
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**								
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	0.039	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	**67**	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	33	<10	**825**	**1130**	67	<10	77	17
F_3 (C_{16}-C_{34})	300	NV	400	384	81	**1080**	270	57	317	237	139
F_4 (C_{34}-C_{50})	2800	NV	2800	328	70	<10	<10	<10	10	32	220

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004

Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 2b - Soil at Depth (> 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-9 SS3**	**MW09-10 SS2**	**MW09-11 SS2**	**MW09-12 SS6**	**MW09-13 SS5**	**MW09-14 SS3**	**MW09-15 SS4**	**BH09-16 SS3**
Sample Date				07-Jan-09	09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	25-Feb-09
Sample Depth (m)				1.5 - 2.1	0.8 - 1.4	0.8 - 1.4	3.8 - 4.4	3.0 - 3.7	1.5 - 2.1	1.5 - 2.1	3.8 - 4.4
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**								
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	31	<10	<10	57	36	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	90	46	<10	57	279	<10	<10	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	16	29	<10	<10	160	<10	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 2b - Soil at Depth (> 0.6 m) Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**BH09-17 SS2**	**MW09-18 SS10**	**MW09-19 SS9**	**MW09-20 SS7**	**MW09-21 SS7**	**MW09-22 SS6**	**MW09-23 SS6**	**MW09-24 SS3**	**MW09-25 SS6**
Sample Date				25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				0.8 - 1.4	2.3 - 2.9	3.8 - 4.4	3.8 - 4.4	0.8 - 1.4	2.3 - 2.9	3.8 - 4.4	3.8 - 4.4	0.8 - 1.4
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**									
Benzene	0.03	0.002	5.3	<0.002	0.3	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	1.6	0.005	<0.002	0.02	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	0.2	0.007	<0.002	0.01	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	3.2	0.023	<0.004	0.015	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	**289**	<10	<10	<10	**44**	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	**607**	77	**177**	<10	**1350**	<10	<10	122
F_3 (C_{16}-C_{34})	300	NV	400	68	**551**	187	51	<10	237	<10	<10	31
F_4 (C_{34}-C_{50})	2800	NV	2800	38	18	69	<10	<10	<10	<10	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 2c - Shallow Surface Soil Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS1**	**SS2**	**SS3**	**SS4**	**SS5**	**SS6**	**SS7**	**SS70**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**								**Dup of SS7**
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	<10	<10	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	18	21	<10	125	26	<10	<10	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	<10	<10	36	<10	<10	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2c - Shallow Surface Soil Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS8**	**SS80**	**SS9**	**SS10**	**SS11**	**SS12**	**SS13**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**		Dup of SS8					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	<10	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	<10	<10	34	<10	32	<10	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	<10	<10	<10	<10	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2c - Shallow Surface Soil Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS14**	**SS15**	**SS16**	**SS17**	**SS18**	**SS19**	**SS20**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**							
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	<10	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	<10	26	44	18	54	73	<10
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	<10	<10	<10	<10	26	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 2c - Shallow Surface Soil Analytical Results - Petroleum Hydrocarbons
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS21**	**SS22**	**SS23**	**SS24**	**SS25**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1,2]**	**MOE Criteria Table 1[3]**	**MOE Criteria Table 3[4]**					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002
Xylenes	11	0.002	34	<0.004	<0.004	<0.004	<0.004	<0.004
F_1 (C_6-C_{10})	30	NV	30	<10	<10	<10	<10	<10
F_2 (C_{10}-C_{16})	150	NV	150	<10	<10	<10	<10	<10
F_3 (C_{16}-C_{34})	300	NV	400	<10	<10	<10	35	18
F_4 (C_{34}-C_{50})	2800	NV	2800	<10	<10	<10	<10	<10

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) CCME Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil, Jan. 2008 - residential/parkland land use, coarse textured soil.
3) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
4) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use, March 2004

Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 3a - Surface Soil (≤ 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				MW09-1 SS1	MW09-2 SS1	MW09-3 SS1	MW09-4 SS1	MW09-5 SS1	MW09-6 SS1	MW09-7 SS1	MW09-8 SS1	MW09-9 SS1
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	CCME Criteria[1]	MOE Criteria Table 1[2]	MOE Criteria Table 3[3]									
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 3a - Surface Soil (≤ 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS1**	**MW09-10 SS100**	**MW09-11 SS1**	**MW09-12 SS1**	**MW09-13 SS1**	**MW09-14 SS1**	**MW09-14 SS100**	**MW09-15 SS1**	**MW09-15 SS100**
Sample Date				09-Jan-09	09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		**Dup of MW09-10 SS1**					**Dup of MW09-14 SS1**		**Dup of MW09-15 SS1**
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	0.021	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	0.098	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	0.125	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004

Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 3a - Surface Soil (≤ 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**BH09-16 SS1**	**BH09-17 SS1**	**MW09-18 SS1**	**MW09-19 SS1**	**MW09-20 SS1**	**MW09-20 SS10**	**MW09-21 SS1**	**MW09-22 SS1**	**MW09-23 SS1**	**MW09-24 SS1**	**MW09-25 SS1**
Sample Date				25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6		0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**						**Dup of MW09-20 SS1**					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004

Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 3b - Soil at Depth (> 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS2**	**MW09-2 SS3**	**MW09-3 SS8**	**MW09-4 SS10**	**MW09-5 SS5**	**MW09-6 SS2**	**MW09-7 SS4**	**MW09-8 SS6**	**MW09-9 SS3**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	3.8 - 4.4	0.8 - 1.4	2.3 - 2.9	3.8 - 4.4	1.5 - 2.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	0.039	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	0.011	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 3b - Soil at Depth (> 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS2**	**MW09-11 SS2**	**MW09-12 SS6**	**MW09-13 SS5**	**MW09-14 SS3**	**MW09-15 SS4**	**BH09-16 SS3**	**BH09-17 SS2**	**MW09-18 SS10**
Sample Date				09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	25-Feb-09	25-Feb-09	25-Feb-09
Sample Depth (m)				0.8 - 1.4	0.8 - 1.4	3.8 - 4.4	3.0 - 3.7	1.5 - 2.1	1.5 - 2.1	0.8 - 1.4	1.5 - 2.1	5.3 - 5.9
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.3
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.3
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.03
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.2
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.05
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	1.6
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.2*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.03
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.03
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
Toluene	0.37	0.002	34	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.2
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.03
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.2
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.03
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	2.9
m,p-Xylenes				<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.3

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 3b - Soil at Depth (> 0.6 m) Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-19 SS9**	**MW09-20 SS7**	**MW09-21 SS7**	**MW09-22 SS6**	**MW09-23 SS6**	**MW09-24 SS3**	**MW09-25 SS6**
Sample Date				25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				7.6 - 8.2	5.3 - 5.9	7.6 - 8.2	0.8 - 1.4	1.5 - 2.1	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Benzene	0.03	0.002	5.3	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	0.005	<0.002	0.02	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*	<0.010*
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	0.007	<0.002	0.01	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	0.017	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				0.006	<0.002	0.015	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 3c - Shallow Surface Soil Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS1**	**SS2**	**SS3**	**SS4**	**SS5**	**SS6**	**SS7**	**SS70**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**								Dup of SS7
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 3c - Shallow Surface Soil Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS8**	**SS80**	**SS9**	**SS10**	**SS11**	**SS12**	**SS13**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		Dup of SS8					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	0.02	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 3c - Shallow Surface Soil Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS14**	**SS15**	**SS16**	**SS17**	**SS18**	**SS19**	**SS20**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 3c - Shallow Surface Soil Analytical Results - Volatile Organic Compounds
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS21**	**SS22**	**SS23**	**SS24**	**SS25**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**					
Benzene	0.03	0.002	5.3	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	NV	NV	14	<0.002	<0.002	<0.002	<0.002	<0.002
Bromoform	NV	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	NV	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	5	0.002	0.10	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	1	0.002	8	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	5	0.006	0.79	<0.003	<0.003	<0.003	<0.003	<0.003
Chloromethane	NV	NV	NV	<0.020	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	NV	0.003	10	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	NV	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	1	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	5	0.002	22	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	5	0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	NV	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	NV	NV	2.3	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	NV	0.003	4.1	<0.003	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	5	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	NV	0.003	0.0066	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.082	0.002	290	<0.002	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	5	0.003	120	<0.003	<0.003	<0.003	<0.003	<0.003
Styrene	5	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	5	NV	0.019	<0.003	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	5	0.004	0.037	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.2	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.37	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	5	0.009	26	<0.002	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	5	0.002	2.3	<0.002	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	3	0.004	1.1	<0.003	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	NV	NV	NV	<0.005	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	NV	NV	NV	<0.003	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	NV	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002
o-Xylene	11	0.002	34	<0.002	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes				<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4a - Surface Soil (≤ 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS1**	**MW09-2 SS1**	**MW09-3 SS1**	**MW09-4 SS1**	**MW09-5 SS1**	**MW09-6 SS1**	**MW09-7 SS1**	**MW09-8 SS1**	**MW09-9 SS1**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Acenaphthylene	NV	0.07	100	<0.02	<0.02	<0.02	0.24	0.09	0.06	0.02	0.37	0.26
Acenaphthene	NV	0.08	1000	<0.02	<0.02	<0.02	0.07	0.04	0.04	<0.02	0.12	0.41
Anthracene	2.5	0.16	28	<0.02	0.03	<0.02	0.41	0.21	0.17	0.05	0.61	1.29
Benzo[a]anthracene	NV	0.74	40	<0.02	0.07	<0.02	0.87	0.47	0.37	0.14	1.21	2
Benzo[a]pyrene*	5.3	0.49	1.2	<0.02	0.06	<0.02	0.84	0.38	0.31	0.11	1.17	**1.57**
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.002	0.082	ND	1.263	0.581	0.468	0.153	1.793	2.442
Benzo[b]fluoranthene	NV	0.47	12	0.02	0.08	<0.02	1.15	0.51	0.4	0.14	1.67	2.07
Benzo[ghi]perylene	NV	0.68	40	<0.02	0.03	<0.02	0.4	0.23	0.18	0.06	0.58	0.86
Benzo[k]fluoranthene	NV	0.48	12	<0.02	0.03	<0.02	0.5	0.26	0.19	0.08	0.77	0.74
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.03	0.06
Chrysene	NV	0.69	12	<0.02	0.08	<0.02	0.92	0.51	0.38	0.15	1.3	1.97
Dibenzo[ah]anthracene	NV	0.16	1.2	<0.02	<0.02	<0.02	0.12	0.05	0.04	<0.02	0.18	0.28
Fluoranthene	50	1.1	40	0.02	0.12	<0.02	1.28	0.76	0.61	0.24	1.8	3.11
Fluorene	NV	0.12	350	<0.02	<0.02	<0.02	0.1	0.07	0.06	0.02	0.18	0.72
Indeno[1,2,3-cd]pyrene	NV	0.38	12	<0.02	0.03	<0.02	0.38	0.2	0.16	0.05	0.59	0.83
1-Methylnaphthalene	NV	0.26	280	<0.02	<0.02	<0.02	0.06	0.02	0.02	<0.02	0.12	0.38
2-Methylnaphthalene	NV	0.29	280	<0.02	<0.02	<0.02	0.1	0.03	0.03	<0.02	0.19	0.25
Naphthalene	NV	0.09	40	<0.02	<0.02	<0.02	0.08	0.04	0.03	0.02	0.16	0.45
Phenanthrene	NV	0.69	40	<0.02	0.06	<0.02	0.79	0.57	0.43	0.16	1.46	3.19
Pyrene	NV	1.0	250	0.02	0.11	<0.02	1.24	0.71	0.55	0.23	1.68	2.74
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4a - Surface Soil (≤ 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS1**	**MW09-10 SS100**	**MW09-11 SS1**	**MW09-12 SS1**	**MW09-13 SS1**	**MW09-14 SS1**	**MW09-14 SS100**	**MW09-15 SS1**	**MW09-15 SS100**
Sample Date				09-Jan-09	09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		**Dup of MW09-10 SS1**					**Dup of MW09-14 SS1**		**Dup of MW09-15 SS1**
Acenaphthylene	NV	0.07	100	0.22	0.19	0.22	0.1	0.04	0.18	0.21	0.02	0.02
Acenaphthene	NV	0.08	1000	0.06	0.05	0.11	0.07	0.03	0.05	0.4	0.02	0.02
Anthracene	2.5	0.16	28	0.36	0.3	0.35	0.28	0.12	0.3	1.3	0.06	0.06
Benzo[a]anthracene	NV	0.74	40	1.04	0.66	0.91	0.63	0.22	0.67	2	0.14	0.13
Benzo[a]pyrene*	5.3	0.49	1.2	1	0.64	0.83	0.54	0.2	0.62	1.61	0.12	0.1
Benzo[a]pyrene (TPE)	5.3	NV	NV	1.511	0.973	1.244	0.832	0.295	0.963	2.458	0.162	0.138
Benzo[b]fluoranthene	NV	0.47	12	1.38	0.86	1.03	0.71	0.25	0.83	2.28	0.14	0.14
Benzo[ghi]perylene	NV	0.68	40	0.5	0.32	0.47	0.31	0.11	0.4	0.69	0.06	0.05
Benzo[k]fluoranthene	NV	0.48	12	0.66	0.41	0.42	0.41	0.14	0.45	0.8	0.07	0.05
Biphenyl	NV	NV	NV	<0.04	<0.04	0.13	<0.02	<0.02	<0.02	0.06	<0.02	<0.02
Chrysene	NV	0.69	12	1.12	0.71	1.01	0.68	0.24	0.72	1.99	0.15	0.14
Dibenzo[ah]anthracene	NV	0.16	1.2	0.14	0.1	0.12	0.08	0.02	0.1	0.24	<0.02	<0.02
Fluoranthene	50	1.1	40	1.53	1.06	1.46	1.13	0.44	1.03	3.34	0.24	0.24
Fluorene	NV	0.12	350	0.08	0.07	0.15	0.09	0.04	0.08	0.55	0.02	0.02
Indeno[1,2,3-cd]pyrene	NV	0.38	12	0.47	0.3	0.43	0.27	0.1	0.37	0.73	0.05	0.04
1-Methylnaphthalene	NV	0.26	280	0.08	0.07	0.25	0.03	0.02	0.05	0.17	<0.02	<0.02
2-Methylnaphthalene	NV	0.29	280	0.11	0.08	0.33	0.03	0.02	0.06	0.19	0.02	<0.02
Naphthalene	NV	0.09	40	0.1	0.07	0.31	0.03	0.02	0.06	0.18	0.03	<0.02
Phenanthrene	NV	0.69	40	0.85	0.71	1.03	0.85	0.38	0.71	3.92	0.21	0.21
Pyrene	NV	1.0	250	1.49	0.99	1.39	1.04	0.38	0.97	2.96	0.23	0.21
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4a - Surface Soil (≤ 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**BH09-16 SS1**	**BH09-17 SS1**	**MW09-18 SS1**	**MW09-19 SS1**	**MW09-20 SS1**	**MW09-20 SS10**	**MW09-21 SS1**	**MW09-22 SS1**	**MW09-23 SS1**	**MW09-24 SS1**	**MW09-25 SS1**
Sample Date				25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6		0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**						**Dup of MW09-20 SS1**					
Acenaphthylene	NV	0.07	100	<0.02	<0.02	<0.02	0.31	0.44	0.23	0.12	0.3	0.25	0.16	0.12
Acenaphthene	NV	0.08	1000	<0.02	<0.02	<0.02	0.65	0.31	0.21	0.05	0.11	0.6	0.22	0.09
Anthracene	2.5	0.16	28	<0.02	<0.02	<0.02	1.68	1.63	0.9	0.23	0.52	1.21	0.78	0.42
Benzo[a]anthracene	NV	0.74	40	0.02	<0.02	<0.02	3.16	2.5	1.5	0.53	1.19	1.84	1.37	0.94
Benzo[a]pyrene*	5.3	0.49	1.2	0.02	<0.02	<0.02	**2.61**	**2.05**	**1.3**	0.46	1.06	**1.49**	1.11	0.69
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.026	ND	ND	4.194	3.329	2.030	0.747	1.651	2.310	1.802	1.095
Benzo[b]fluoranthene	NV	0.47	12	0.03	<0.02	<0.02	3.86	4.27	1.88	0.76	1.77	2.26	1.89	1.13
Benzo[ghi]perylene	NV	0.68	40	0.02	<0.02	<0.02	1.43	1.09	0.66	0.31	0.66	0.75	0.6	0.37
Benzo[k]fluoranthene	NV	0.48	12	<0.02	<0.02	<0.02	2.01	1.46	0.86	0.42	0.73	1.1	1.08	0.57
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	0.06	0.05	0.03	0.02	0.04	0.12	0.04	0.02
Chrysene	NV	0.69	12	0.03	<0.02	<0.02	3.32	2.46	1.53	0.6	1.32	1.91	1.47	0.98
Dibenzo[ah]anthracene	NV	0.16	1.2	<0.02	<0.02	<0.02	0.49	0.32	0.22	0.08	0.14	0.2	0.18	0.09
Fluoranthene	50	1.1	40	0.07	<0.02	<0.02	5.59	4.25	2.59	0.91	1.79	3.13	2.45	1.64
Fluorene	NV	0.12	350	<0.02	<0.02	<0.02	0.95	0.66	0.39	0.07	0.15	0.62	0.32	0.14
Indeno[1,2,3-cd]pyrene	NV	0.38	12	<0.02	<0.02	<0.02	1.43	1	0.64	0.27	0.62	0.73	0.57	0.37
1-Methylnaphthalene	NV	0.26	280	<0.02	<0.02	<0.02	0.14	0.14	0.09	0.09	0.17	0.3	0.11	0.06
2-Methylnaphthalene	NV	0.29	280	<0.02	<0.02	<0.02	0.18	0.15	0.1	0.1	0.23	0.42	0.13	0.07
Naphthalene	NV	0.09	40	<0.02	<0.02	<0.02	0.58	0.18	0.13	0.08	0.2	0.69	0.23	0.1
Phenanthrene	NV	0.69	40	0.06	<0.02	<0.02	5.08	3.26	2.1	0.67	1.4	3.66	2.25	1.37
Pyrene	NV	1.0	250	0.11	<0.02	<0.02	4.81	3.82	2.31	0.83	1.66	2.77	2.11	1.39
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4b - Soil at Depth (> 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS2**	**MW09-2 SS3**	**MW09-3 SS8**	**MW09-4 SS10**	**MW09-5 SS5**	**MW09-6 SS2**	**MW09-7 SS4**	**MW09-8 SS6**	**MW09-9 SS3**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	3.8 - 4.4	0.8 - 1.4	2.3 - 2.9	3.8 - 4.4	1.5 - 2.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Acenaphthylene	NV	0.07	100	0.07	<0.02	0.12	0.06	<0.02	2.84	0.09	<0.02	0.5
Acenaphthene	NV	0.08	1000	0.15	0.03	0.22	0.18	0.02	2.69	0.05	0.02	0.28
Anthracene	2.5	0.16	28	0.25	0.06	0.6	0.05	<0.02	9.58	0.24	0.18	1.03
Benzo[a]anthracene	NV	0.74	40	0.58	0.13	1.03	0.16	<0.02	12.2	0.48	0.1	2.33
Benzo[a]pyrene*	5.3	0.49	1.2	0.51	0.14	0.82	0.03	<0.02	**7.72**	0.4	0.08	**2.07**
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.789	0.207	1.225	0.052	ND	11.341	0.606	0.108	3.206
Benzo[b]fluoranthene	NV	0.47	12	0.78	0.17	1.08	0.03	<0.02	10.5	0.54	0.1	2.77
Benzo[ghi]perylene	NV	0.68	40	0.32	0.08	0.43	<0.02	<0.02	2.99	0.26	0.04	1.26
Benzo[k]fluoranthene	NV	0.48	12	0.27	0.08	0.5	0.02	<0.02	3.95	0.24	0.04	1.01
Biphenyl	NV	NV	NV	0.08	<0.02	0.03	<0.02	0.03	<0.40	<0.02	<0.02	0.04
Chrysene	NV	0.69	12	0.69	0.13	1.07	0.05	<0.02	13.5	0.53	0.1	2.47
Dibenzo[ah]anthracene	NV	0.16	1.2	0.08	0.02	0.09	<0.02	<0.02	0.56	0.05	<0.02	0.37
Fluoranthene	50	1.1	40	0.91	0.2	1.75	0.1	<0.02	24.3	0.86	0.19	3.42
Fluorene	NV	0.12	350	0.09	0.02	0.28	0.3	0.04	4	0.08	0.02	0.39
Indeno[1,2,3-cd]pyrene	NV	0.38	12	0.26	0.07	0.39	<0.02	<0.02	2.31	0.22	0.03	1.18
1-Methylnaphthalene	NV	0.26	280	0.7	<0.02	0.06	1.54	0.29	0.8	0.05	0.04	0.12
2-Methylnaphthalene	NV	0.29	280	0.82	<0.02	0.07	0.12	0.25	0.96	0.05	0.03	0.14
Naphthalene	NV	0.09	40	0.47	0.02	0.08	0.13	0.1	1.03	0.05	0.04	0.23
Phenanthrene	NV	0.69	40	0.88	0.16	1.74	0.32	0.02	25.5	0.75	0.18	2.69
Pyrene	NV	1.0	250	0.86	0.19	1.58	0.1	<0.02	22.3	0.79	0.17	3.26
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-6} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4b - Soil at Depth (> 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS2**	**MW09-11 SS2**	**MW09-12 SS6**	**MW09-13 SS5**	**MW09-14 SS3**	**MW09-15 SS4**	**BH09-16 SS3**	**BH09-17 SS2**	**MW09-18 SS10**
Sample Date				09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	25-Feb-09	25-Feb-09	25-Feb-09
Sample Depth (m)				0.8 - 1.4	0.8 - 1.4	3.8 - 4.4	3.0 - 3.7	1.5 - 2.1	1.5 - 2.1	0.8 - 1.4	1.5 - 2.1	5.3 - 5.9
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Acenaphthylene	NV	0.07	100	0.66	0.09	<0.02	<0.02	<0.02	<0.02	<0.02	0.07	0.23
Acenaphthene	NV	0.08	1000	0.47	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.29
Anthracene	2.5	0.16	28	1.66	0.23	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	0.46
Benzo[a]anthracene	NV	0.74	40	2.77	0.48	0.02	0.02	0.02	0.02	0.05	0.5	0.77
Benzo[a]pyrene*	5.3	0.49	1.2	**2.27**	0.43	<0.02	<0.02	<0.02	<0.02	0.04	0.44	0.73
Benzo[a]pyrene (TPE)	5.3	NV	NV	3.476	0.663	0.002	0.004	0.004	0.004	0.055	0.674	1.143
Benzo[b]fluoranthene	NV	0.47	12	3.05	0.55	<0.02	0.02	0.02	0.02	0.05	0.62	1
Benzo[ghi]perylene	NV	0.68	40	0.98	0.24	<0.02	<0.02	<0.02	<0.02	0.03	0.27	0.49
Benzo[k]fluoranthene	NV	0.48	12	1.12	0.29	<0.02	<0.02	<0.02	<0.02	0.02	0.31	0.49
Biphenyl	NV	NV	NV	0.06	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.15
Chrysene	NV	0.69	12	2.71	0.51	<0.02	0.02	0.02	0.02	0.05	0.56	0.91
Dibenzo[ah]anthracene	NV	0.16	1.2	0.37	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.13
Fluoranthene	50	1.1	40	4.13	0.81	0.02	0.02	0.02	0.04	0.08	1.01	1.42
Fluorene	NV	0.12	350	0.71	0.1	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	0.44
Indeno[1,2,3-cd]pyrene	NV	0.38	12	1.05	0.23	<0.02	<0.02	<0.02	<0.02	0.02	0.23	0.43
1-Methylnaphthalene	NV	0.26	280	0.2	0.03	0.03	<0.02	<0.02	<0.02	<0.02	0.03	1.16
2-Methylnaphthalene	NV	0.29	280	0.21	0.04	0.03	0.02	<0.02	<0.02	<0.02	0.05	1.88
Naphthalene	NV	0.09	40	0.36	0.07	0.02	<0.02	<0.02	<0.02	<0.02	0.06	1.56
Phenanthrene	NV	0.69	40	4	0.67	<0.02	0.02	0.02	0.03	0.04	0.6	1.59
Pyrene	NV	1.0	250	3.74	0.74	0.02	0.03	0.02	0.03	0.08	0.95	1.34
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4b - Soil at Depth (> 0.6 m) Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-19 SS9**	**MW09-20 SS7**	**MW09-21 SS7**	**MW09-22 SS6**	**MW09-23 SS6**	**MW09-24 SS3**	**MW09-25 SS6**
Sample Date				25-Feb-09	25-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09
Sample Depth (m)				7.6 - 8.2	0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	0.8 - 1.4	1.5 - 2.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Acenaphthylene	NV	0.07	100	0.51	0.16	0.3	0.1	0.04	0.1	0.03
Acenaphthene	NV	0.08	1000	0.53	0.15	0.17	0.37	<0.02	0.07	0.03
Anthracene	2.5	0.16	28	1.57	0.45	0.73	0.04	0.07	0.27	0.04
Benzo[a]anthracene	NV	0.74	40	2.83	0.76	1.15	0.1	0.17	0.57	0.09
Benzo[a]pyrene*	5.3	0.49	1.2	**2.28**	0.65	0.94	0.08	0.15	0.48	0.07
Benzo[a]pyrene (TPE)	5.3	NV	NV	3.539	1.002	1.536	0.115	0.212	0.768	0.101
Benzo[b]fluoranthene	NV	0.47	12	2.99	0.87	1.73	0.12	0.23	0.79	0.11
Benzo[ghi]perylene	NV	0.68	40	1.22	0.36	0.6	0.05	0.08	0.27	0.04
Benzo[k]fluoranthene	NV	0.48	12	1.32	0.43	0.93	0.07	0.13	0.37	0.06
Biphenyl	NV	NV	NV	0.1	0.04	0.07	<0.02	<0.02	0.02	0.03
Chrysene	NV	0.69	12	2.96	0.79	1.2	0.1	0.18	0.63	0.1
Dibenzo[ah]anthracene	NV	0.16	1.2	0.39	0.1	0.14	<0.02	<0.02	0.08	<0.02
Fluoranthene	50	1.1	40	4.43	1.36	1.87	0.17	0.25	1	0.16
Fluorene	NV	0.12	350	0.94	0.32	0.24	0.75	0.02	0.09	0.08
Indeno[1,2,3-cd]pyrene	NV	0.38	12	1.13	0.34	0.57	0.04	0.06	0.26	0.04
1-Methylnaphthalene	NV	0.26	280	0.24	0.61	0.17	7.5	0.02	0.06	0.59
2-Methylnaphthalene	NV	0.29	280	0.33	0.52	0.31	8.6	0.02	0.08	0.25
Naphthalene	NV	0.09	40	0.5	0.29	0.26	4.47	0.02	0.1	0.15
Phenanthrene	NV	0.69	40	4.27	1.22	1.79	0.43	0.16	0.82	0.14
Pyrene	NV	1.0	250	4.19	1.29	1.64	0.16	0.23	0.89	0.15
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4c - Shallow Surface Soil Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS1**	**SS2**	**SS3**	**SS4**	**SS5**	**SS6**	**SS7**	**SS70**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**								Dup of SS7
Acenaphthylene	NV	0.07	10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03
Acenaphthene	NV	0.08	10	<0.02	0.03	<0.02	0.04	0.03	<0.02	0.02	0.03
Anthracene	2.5	0.16	10	<0.02	0.06	0.03	0.2	0.06	0.05	0.06	0.09
Benzo[a]anthracene	NV	0.74	1	0.03	0.1	0.03	0.1	0.12	0.02	0.13	0.24
Benzo[a]pyrene*	5.3	0.49	1	0.02	0.09	0.03	0.09	0.11	0.03	0.11	0.18
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.030	0.137	0.051	0.165	0.176	0.042	0.175	0.297
Benzo[b]fluoranthene	NV	0.47	1	0.04	0.2	0.09	0.24	0.16	0.05	0.16	0.28
Benzo[ghi]perylene	NV	0.68	1	0.02	0.07	0.04	0.09	0.08	0.02	0.07	0.1
Benzo[k]fluoranthene	NV	0.48	1	0.02	0.09	0.05	0.1	0.09	0.02	0.08	0.13
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	NV	0.69	1	0.03	0.21	0.07	0.27	0.13	0.04	0.13	0.21
Dibenzo[ah]anthracene	NV	0.16	1	<0.02	<0.02	<0.02	0.02	0.02	<0.02	0.02	0.04
Fluoranthene	50	1.1	10	0.06	0.26	0.08	0.21	0.25	0.07	0.26	0.42
Fluorene	NV	0.12	10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03
Indeno[1,2,3-cd]pyrene	NV	0.38	1	<0.02	0.05	0.03	0.07	0.07	0.02	0.06	0.09
1-Methylnaphthalene	NV	0.26	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04
2-Methylnaphthalene	NV	0.29	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06
Naphthalene	NV	0.09	5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06
Phenanthrene	NV	0.69	5	0.03	0.09	0.03	0.11	0.14	0.04	0.15	0.29
Pyrene	NV	1.0	10	0.05	0.23	0.07	0.19	0.22	0.07	0.22	0.35
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4c - Shallow Surface Soil Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS8**	**SS80**	**SS9**	**SS10**	**SS11**	**SS12**	**SS13**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		Dup of SS8					
Acenaphthylene	NV	0.07	100	<0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02
Acenaphthene	NV	0.08	1000	<0.02	<0.02	0.04	<0.02	0.03	0.02	0.02
Anthracene	2.5	0.16	28	<0.02	<0.02	0.11	0.03	0.06	0.03	0.03
Benzo[a]anthracene	NV	0.74	40	<0.02	<0.02	0.25	0.08	0.12	0.07	0.06
Benzo[a]pyrene*	5.3	0.49	1.2	<0.02	<0.02	0.22	0.07	0.1	0.06	0.05
Benzo[a]pyrene (TPE)	5.3	NV	NV	ND	ND	0.335	0.098	0.160	0.084	0.071
Benzo[b]fluoranthene	NV	0.47	12	<0.02	0.02	0.29	0.1	0.14	0.09	0.07
Benzo[ghi]perylene	NV	0.68	40	<0.02	<0.02	0.13	0.04	0.06	0.04	0.03
Benzo[k]fluoranthene	NV	0.48	12	<0.02	<0.02	0.15	0.05	0.06	0.04	0.04
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	NV	0.69	12	<0.02	<0.02	0.26	0.08	0.13	0.07	0.06
Dibenzo[ah]anthracene	NV	0.16	1.2	<0.02	<0.02	0.03	<0.02	0.02	<0.02	<0.02
Fluoranthene	50	1.1	40	0.02	0.02	0.53	0.17	0.25	0.15	0.11
Fluorene	NV	0.12	350	<0.02	<0.02	0.03	<0.02	0.02	<0.02	<0.02
Indeno[1,2,3-cd]pyrene	NV	0.38	12	<0.02	<0.02	0.12	0.04	0.06	0.03	0.03
1-Methylnaphthalene	NV	0.26	280	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2-Methylnaphthalene	NV	0.29	280	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02
Naphthalene	NV	0.09	40	<0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02
Phenanthrene	NV	0.69	40	<0.02	<0.02	0.29	0.1	0.17	0.09	0.07
Pyrene	NV	1.0	250	0.02	0.02	0.45	0.14	0.22	0.12	0.1
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4c - Shallow Surface Soil Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS14**	**SS15**	**SS16**	**SS17**	**SS18**	**SS19**	**SS20**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Acenaphthylene	NV	0.07	100	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
Acenaphthene	NV	0.08	1000	<0.02	0.04	<0.02	<0.02	<0.02	0.13	0.11
Anthracene	2.5	0.16	28	0.03	0.08	<0.02	<0.02	<0.02	0.31	0.22
Benzo[a]anthracene	NV	0.74	40	0.06	0.17	0.02	0.03	<0.02	0.16	0.29
Benzo[a]pyrene*	5.3	0.49	1.2	0.05	0.14	0.02	0.02	<0.02	0.24	0.29
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.071	0.227	0.027	0.031	ND	0.417	0.499
Benzo[b]fluoranthene	NV	0.47	12	0.08	0.21	0.04	0.05	0.02	0.61	0.62
Benzo[ghi]perylene	NV	0.68	40	0.03	0.09	0.02	0.02	<0.02	0.25	0.22
Benzo[k]fluoranthene	NV	0.48	12	0.03	0.08	<0.02	0.02	<0.02	0.23	0.31
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	NV	0.69	12	0.06	0.18	0.03	0.04	<0.02	0.39	0.46
Dibenzo[ah]anthracene	NV	0.16	1.2	<0.02	0.03	<0.02	<0.02	<0.02	0.05	0.06
Fluoranthene	50	1.1	40	0.12	0.35	0.05	0.07	0.02	0.24	0.69
Fluorene	NV	0.12	350	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
Indeno[1,2,3-cd]pyrene	NV	0.38	12	0.03	0.08	<0.02	<0.02	<0.02	0.21	0.2
1-Methylnaphthalene	NV	0.26	280	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
2-Methylnaphthalene	NV	0.29	280	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
Naphthalene	NV	0.09	40	<0.02	0.02	<0.02	<0.02	<0.02	0.02	0.03
Phenanthrene	NV	0.69	40	0.09	0.25	0.03	0.03	<0.02	0.09	0.35
Pyrene	NV	1.0	250	0.1	0.31	0.04	0.06	0.02	0.21	0.59
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 4c - Shallow Surface Soil Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS21**	**SS22**	**SS23**	**SS24**	**SS25**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**					
Acenaphthylene	NV	0.07	100	<0.02	<0.02	<0.02	0.02	<0.02
Acenaphthene	NV	0.08	1000	0.03	0.03	0.03	0.06	<0.02
Anthracene	2.5	0.16	28	0.04	0.05	0.05	0.11	<0.02
Benzo[a]anthracene	NV	0.74	40	0.09	0.11	0.11	0.23	0.04
Benzo[a]pyrene*	5.3	0.49	1.2	0.09	0.11	0.1	0.21	0.03
Benzo[a]pyrene (TPE)	5.3	NV	NV	0.147	0.172	0.161	0.322	0.045
Benzo[b]fluoranthene	NV	0.47	12	0.13	0.15	0.16	0.31	0.05
Benzo[ghi]perylene	NV	0.68	40	0.06	0.07	0.06	0.12	0.02
Benzo[k]fluoranthene	NV	0.48	12	0.08	0.08	0.07	0.13	0.03
Biphenyl	NV	NV	NV	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	NV	0.69	12	0.1	0.12	0.11	0.24	0.04
Dibenzo[ah]anthracene	NV	0.16	1.2	0.02	0.02	0.02	0.03	<0.02
Fluoranthene	50	1.1	40	0.17	0.21	0.2	0.42	0.07
Fluorene	NV	0.12	350	<0.02	<0.02	<0.02	0.02	<0.02
Indeno[1,2,3-cd]pyrene	NV	0.38	12	0.05	0.06	0.05	0.11	0.02
1-Methylnaphthalene	NV	0.26	280	<0.02	<0.02	<0.02	0.02	<0.02
2-Methylnaphthalene	NV	0.29	280	<0.02	<0.02	0.02	0.03	<0.02
Naphthalene	NV	0.09	40	<0.02	<0.02	<0.02	0.02	<0.02
Phenanthrene	NV	0.69	40	0.09	0.11	0.11	0.25	0.04
Pyrene	NV	1.0	250	0.14	0.18	0.17	0.37	0.06
PCBs, total	1.3	0.3	5	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
* The guideline for benzo{a}pyrene is a human health guideline based on a 10^{-5} incremental lifetime cancer risk
Benzo[a]pyrene (TPE) total potency equivalents using on-site soil data for for other PAH parameters
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5a - Surface Soil (≤ 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS1**	**MW09-2 SS1**	**MW09-3 SS1**	**MW09-4 SS1**	**MW09-5 SS1**	**MW09-6 SS1**	**MW09-7 SS1**	**MW09-8 SS1**	**MW09-9 SS1**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Antimony	20	1	13	<1	<1	<1	<1	<1	<1	<1	<1	1
Arsenic	12	17	20	<1	<1	<1	2	<1	<1	<1	<1	<1
Barium	500	210	750	78	57	27	28	93	92	93	102	130
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.5	<0.5	0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Chromium (total)	64	71	750	15	14	9	9	17	18	21	23	22
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	<5	<5	<5	5	<5	<5	5	5
Copper	63	85	225	7	10	5	7	18	8	14	18	31
Lead	140	120	200	13	23	5	12	49	18	19	14	89
Mercury	6.6	0.23	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Molybdenum	10	2.5	40	<1	<1	<1	3	<1	1	1	1	<1
Nickel	50	43	150	8	8	6	11	13	8	11	12	18
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	26	25	23	18	16	26	28	30	26
Zinc	200	160	600	35	36	<20	<20	44	30	33	32	72

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5a - Surface Soil (≤ 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS1**	**MW09-10 SS100**	**MW09-11 SS1**	**MW09-12 SS1**	**MW09-13 SS1**	**MW09-14 SS1**	**MW09-14 SS100**	**MW09-15 SS1**	**MW09-15 SS100**
Sample Date				09-Jan-09	09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		**Dup of MW09-10 SS1**					**Dup of MW09-14 SS1**		**Dup of MW09-15 SS1**
Antimony	20	1	13	<1	<1	1	2	<1	<1	<1	<1	<1
Arsenic	12	17	20	<1	<1	<1	<1	<1	2	2	<1	<1
Barium	500	210	750	104	103	138	138	112	113	125	61	57
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	0.5	0.6	0.5	<0.5	<0.5
Chromium (total)	64	71	750	24	23	21	28	23	24	24	12	12
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	5	5	7	5	8	7	<5	<5
Copper	63	85	225	12	12	30	19	18	25	26	11	11
Lead	140	120	200	10	13	85	39	85	86	102	28	32
Mercury	6.6	0.23	10	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Molybdenum	10	2.5	40	<1	<1	<1	1	<1	2	2	<1	<1
Nickel	50	43	150	11	12	15	16	14	28	21	11	10
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	31	31	23	35	34	33	33	17	18
Zinc	200	160	600	30	33	77	46	50	51	66	40	34

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5a - Surface Soil (≤ 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**BH09-16 SS1**	**BH09-17 SS1**	**MW09-18 SS1**	**MW09-19 SS1**	**MW09-20 SS1**	**MW09-20 SS10**	**MW09-21 SS1**	**MW09-22 SS1**	**MW09-23 SS1**	**MW09-24 SS1**	**MW09-25 SS1**
Sample Date				25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6		0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6	0 - 0.6
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**						**Dup of MW09-20 SS1**					
Antimony	20	1	13	<1	<1	<1	<1	<1	<1	3	<1	<1	<1	<1
Arsenic	12	17	20	4	1	2	<1	2	2	3	4	3	2	2
Barium	500	210	750	28	33	24	35	100	93	83	190	149	99	116
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	NA	NA	NA	NA	NA	NA	<0.5	<0.5	0.6	<0.5	<0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.7	<0.5	<0.5
Chromium (total)	64	71	750	9	12	10	9	19	20	16	20	23	16	19
Chromium VI	0.4	2.5	8	NA	NA	NA	NA	NA	NA	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	5	<5	<5	<5	5	5	5	6	6	5	5
Copper	63	85	225	9	7	6	6	24	20	25	57	44	17	26
Lead	140	120	200	20	5	7	5	100	89	66	144	112	43	55
Mercury	6.6	0.23	10	NA	NA	NA	NA	NA	NA	0.1	0.3	0.2	<0.1	<0.1
Molybdenum	10	2.5	40	4	<1	2	<1	1	1	2	1	<1	<1	<1
Nickel	50	43	150	13	8	8	6	15	15	13	24	18	14	15
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	15	23	19	19	20	20	22	22	24	24	22
Zinc	200	160	600	<20	<20	<20	<20	76	61	46	121	88	35	53

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5b - Soil at Depth (> 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1 SS2**	**MW09-2 SS3**	**MW09-3 SS8**	**MW09-4 SS10**	**MW09-5 SS5**	**MW09-6 SS2**	**MW09-7 SS4**	**MW09-8 SS6**	**MW09-9 SS3**
Sample Date				12-Jan-09	12-Jan-09	12-Jan-09	09-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09	09-Jan-09	07-Jan-09
Sample Depth (m)				0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	3.8 - 4.4	0.8 - 1.4	2.3 - 2.9	3.8 - 4.4	1.5 - 2.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Antimony	20	1	13	<1	<1	2	<1	<1	<1	2	<1	7
Arsenic	12	17	20	4	<1	2	<1	<1	<1	2	3	<1
Barium	500	210	750	131	35	233	68	186	104	219	158	194
Beryllium	4	1.2	1.2	<0.5	<0.5	0.5	0.5	0.9	<0.5	0.7	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	<0.5	1	<0.5	0.8	<0.5	1.3	0.5	0.6
Cadmium	10	1	12	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	1.2
Chromium (total)	64	71	750	20	8	28	17	38	21	18	19	21
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	6	<5	7	<5	11	5	8	<5	6
Copper	63	85	225	27	9	58	7	14	13	40	19	166
Lead	140	120	200	109	14	**203**	19	42	27	82	54	**220**
Mercury	6.6	0.23	10	0.2	<0.1	0.3	0.1	0.1	<0.1	0.2	<0.1	0.4
Molybdenum	10	2.5	40	<1	<1	<1	<1	<1	<1	1	<1	<1
Nickel	50	43	150	15	5	22	15	25	11	18	17	17
Selenium	1	1.9	10	<1	<1	<1	<1	1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	26	18	25	<10	31	27	10	15	25
Zinc	200	160	600	95	<20	206	<20	45	39	61	45	187

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5b - Soil at Depth (> 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10 SS2**	**MW09-11 SS2**	**MW09-12 SS6**	**MW09-13 SS5**	**MW09-14 SS3**	**MW09-15 SS4**	**BH09-16 SS3**	**BH09-17 SS2**	**MW09-18 SS10**
Sample Date				09-Jan-09	07-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09	25-Feb-09	25-Feb-09	25-Feb-09
Sample Depth (m)				0.8 - 1.4	0.8 - 1.4	3.8 - 4.4	3.0 - 3.7	1.5 - 2.1	1.5 - 2.1	0.8 - 1.4	1.5 - 2.1	5.3 - 5.9
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**									
Antimony	20	1	13	<1	<1	3	<1	<1	<1	<1	<1	<1
Arsenic	12	17	20	<1	<1	4	1	<1	2	3	2	4
Barium	500	210	750	90	89	187	115	199	99	41	103	196
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	NA	NA	NA
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7
Chromium (total)	64	71	750	18	15	32	22	56	31	10	16	23
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	NA	NA	NA
Cobalt	50	21	40	6	5	9	7	12	6	<5	5	6
Copper	63	85	225	22	12	29	11	30	13	11	24	99
Lead	140	120	200	59	26	58	79	22	23	20	32	**225**
Mercury	6.6	0.23	10	0.1	<0.1	<0.1	0.2	0.1	<0.1	NA	NA	NA
Molybdenum	10	2.5	40	<1	<1	1	<1	<1	3	2	<1	<1
Nickel	50	43	150	14	10	27	16	33	20	10	13	21
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	24	20	33	12	57	16	17	24	25
Zinc	200	160	600	49	32	56	40	64	34	21	34	188

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5b - Soil at Depth (> 0.6 m) Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-19 SS9**	**MW09-20 SS7**	**MW09-21 SS7**	**MW09-22 SS6**	**MW09-23 SS6**	**MW09-24 SS3**	**MW09-25 SS6**
Sample Date				25-Feb-09	25-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09	27-Feb-09
Sample Depth (m)				7.6 - 8.2	0.8 - 1.4	1.5 - 2.1	5.3 - 5.9	7.6 - 8.2	0.8 - 1.4	1.5 - 2.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Antimony	20	1	13	<1	<1	<1	<1	<1	<1	<1
Arsenic	12	17	20	2	2	4	3	4	6	3
Barium	500	210	750	99	115	166	191	145	161	197
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	0.6	<0.5	0.5	0.6
Boron	NV	NV	1.5	NA	NA	0.7	0.6	0.7	0.5	0.7
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	64	71	750	44	31	25	26	18	30	31
Chromium VI	0.4	2.5	8	NA	NA	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	5	6	7	8	5	9	7
Copper	63	85	225	36	57	50	19	106	44	94
Lead	140	120	200	69	97	142	48	47	89	118
Mercury	6.6	0.23	10	NA	NA	0.3	0.1	0.1	0.1	0.3
Molybdenum	10	2.5	40	<1	<1	<1	<1	<1	1	<1
Nickel	50	43	150	13	17	18	22	15	23	20
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	1.5	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	19	25	21	18	12	35	25
Zinc	200	160	600	54	69	87	43	51	83	114

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5c - Shallow Surface Soil Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS1**	**SS2**	**SS3**	**SS4**	**SS5**	**SS6**	**SS7**	**SS70**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**								Dup of SS7
Antimony	20	1	13	<1	1	<1	<1	<1	<1	<1	<1
Arsenic	12	17	20	1	1	1	<1	1	<1	1	1
Barium	500	210	750	96	70	32	35	77	102	93	92
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	0.7	<0.5	1.4	1	0.5	0.5	0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	64	71	750	18	16	9	10	14	18	22	21
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	<5	<5	<5	<5	<5	<5	5
Copper	63	85	225	10	11	7	9	9	7	14	13
Lead	140	120	200	19	25	16	5	23	10	19	18
Mercury	6.6	0.23	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	10	2.5	40	<1	<1	<1	<1	<1	1	1	<1
Nickel	50	43	150	9	9	6	6	7	7	11	10
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	31	28	20	18	26	27	29	29
Zinc	200	160	600	48	52	26	<20	42	24	33	33

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5c - Shallow Surface Soil Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS8**	**SS80**	**SS9**	**SS10**	**SS11**	**SS12**	**SS13**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**		Dup of SS8					
Antimony	20	1	13	<1	<1	<1	<1	<1	<1	<1
Arsenic	12	17	20	1	1	1	1	<1	1	<1
Barium	500	210	750	102	96	105	97	88	106	103
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	0.7	0.7	0.6	0.5	0.6	0.7	0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	64	71	750	23	22	22	21	21	23	23
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	<5	5	<5	<5	<5	<5
Copper	63	85	225	14	13	17	11	12	13	11
Lead	140	120	200	8	8	22	16	15	14	13
Mercury	6.6	0.23	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	10	2.5	40	1	<1	<1	1	<1	<1	<1
Nickel	50	43	150	11	11	11	10	9	11	10
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	30	29	30	29	27	28	31
Zinc	200	160	600	30	29	39	30	31	34	30

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5c - Shallow Surface Soil Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS14**	**SS15**	**SS16**	**SS17**	**SS18**	**SS19**	**SS20**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**							
Antimony	20	1	13	<1	<1	<1	<1	<1	<1	<1
Arsenic	12	17	20	<1	1	1	2	3	2	4
Barium	500	210	750	87	65	57	71	58	43	54
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	0.5	0.6	1.1	0.5	0.6	<0.5	<0.5
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	64	71	750	19	12	12	18	14	12	12
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	<5	<5	5	5	<5	5
Copper	63	85	225	9	13	13	27	23	10	14
Lead	140	120	200	12	35	51	27	10	44	43
Mercury	6.6	0.23	10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	10	2.5	40	<1	<1	<1	1	<1	<1	1
Nickel	50	43	150	9	11	7	10	9	8	11
Selenium	1	1.9	10	<1	<1	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1	<1	<1
Vanadium	130	91	200	28	18	23	27	23	24	20
Zinc	200	160	600	29	60	61	89	56	38	45

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 5c - Shallow Surface Soil Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**SS21**	**SS22**	**SS23**	**SS24**	**SS25**
Sample Date				19-May-09	19-May-09	19-May-09	19-May-09	19-May-09
Sample Depth (m)				0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Parameter (ug/g)	**CCME Criteria[1]**	**MOE Criteria Table 1[2]**	**MOE Criteria Table 3[3]**					
Antimony	20	1	13	<1	<1	<1	<1	<1
Arsenic	12	17	20	1	3	<1	1	<1
Barium	500	210	750	86	89	101	94	105
Beryllium	4	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	NV	NV	1.5	<0.5	0.7	0.6	0.6	0.6
Cadmium	10	1	12	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	64	71	750	20	21	21	23	20
Chromium VI	0.4	2.5	8	<0.4	<0.4	<0.4	<0.4	<0.4
Cobalt	50	21	40	<5	6	<5	5	<5
Copper	63	85	225	12	15	14	15	9
Lead	140	120	200	18	26	18	26	10
Mercury	6.6	0.23	10	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	10	2.5	40	1	2	<1	<1	<1
Nickel	50	43	150	10	14	10	11	9
Selenium	1	1.9	10	<1	<1	<1	<1	<1
Silver	20	0.42	20	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	1	2.5	4.1	<1	<1	<1	<1	<1
Vanadium	130	91	200	27	26	28	30	27
Zinc	200	160	600	35	36	35	43	30

Notes:
1) CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health. 2008 - residential/parkland land use, coarse grained soil
2) MOE Table 1: Full Depth Background Site Condition Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value

Table 6 - Groundwater Analytical Results - Petroleum Hydrocarbons & BTEX
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1**	**MW09-2**	**MW09-3**	**MW09-4**	**MW09-5**	**MW09-6**	**MW09-7**	**MW09-8**
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								
Benzene	370	5	1900	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	2800	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5
Toluene	2	0.8	5900	<0.5	<0.5	6.5	128	<0.5	<0.5	<0.5	<0.5
Xylenes	NV	72	5600	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0
F1 PHCs (C_6-C_{10})	NV	NV	NV	<200	<200	<200	<200	<200	<200	<200	<200
F2 PHCs (C_{10}-C_{16})	NV	NV	NV	<100	<100	<100	863	<100	1290	<100	<100
F3 PHCs (C_{16}-C_{34})	NV	NV	NV	<100	<100	<100	300	<100	920	<100	<100
F4 PHCs (C_{34}-C_{50})	NV	NV	NV	<100	<100	<100	<100	<100	<100	<100	<100
Modified PHC (F1 + F2 + F3)	NV	NV	20000 [4]	<400	<400	<400	1163	<400	2210	<400	<400

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life* . Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
4) Atlantic RBCA (Risk-Based Corrective Action) Reference Documentation for Petroleum Impacted Sites Sept. 2003
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 6 - Groundwater Analytical Results - Petroleum Hydrocarbons & BTEX
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-9**	**MW09-10**	**MW09-11**	**MW09-12**	**MW09-13**	**MW09-14**	**MW09-15**	**MW09-150**
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								**Dup of MW09-15**
Benzene	370	5	1900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	2800	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	2	0.8	5900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes	NV	72	5600	<1.0	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0
F1 PHCs (C_6-C_{10})	NV	NV	NV	<200	<200	<200	<200	<200	<200	<200	<200
F2 PHCs (C_{10}-C_{16})	NV	NV	NV	<100	1590	172000	<100	344	<100	<100	<100
F3 PHCs (C_{16}-C_{34})	NV	NV	NV	<100	320	27000	<100	1620	<100	<100	<100
F4 PHCs (C_{34}-C_{50})	NV	NV	NV	<100	<100	<160	<100	680	<100	<100	<100
Modified PHC (F1 + F2 + F3)	NV	NV	20000 [4]	<400	1910	**199000**	<400	1964	<400	<400	<400

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life* . Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
4) Atlantic RBCA (Risk-Based Corrective Action) Reference Documentation for Petroleum Impacted Sites Sept. 2003
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 6 - Groundwater Analytical Results - Petroleum Hydrocarbons & BTEX
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-18**	**MW09-20**	**MW09-21**	**MW09-22**	**MW09-220**	**MW09-23**	**MW09-24**	**MW09-25**
Sample Date				06-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**					**Duplicate of MW09-22**			
Benzene	370	5	1900	34.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	2800	30.1	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	2	0.8	5900	50.9	<0.5	5.9	0.5	<0.5	<0.5	<0.5	<0.5
Xylenes	NV	72	5600	112.2	1	1	0.9	<1.0	<1.0	<1.0	<1.0
F1 PHCs (C_6-C_{10})	NV	NV	NV	280	<200	<200	<200	<200	<200	<200	<200
F2 PHCs (C_{10}-C_{16})	NV	NV	NV	<100	1740	424	86300	69900	<100	<100	960
F3 PHCs (C_{16}-C_{34})	NV	NV	NV	<100	421	<100	11400	9570	<100	<100	221
F4 PHCs (C_{34}-C_{50})	NV	NV	NV	<100	<100	<100	<100	<100	<100	<100	<100
Modified PHC (F1 + F2 + F3)	NV	NV	20000 [4]	280	2161	424	**97700**	**79470**	<400	<400	1181

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life* . Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
4) Atlantic RBCA (Risk-Based Corrective Action) Reference Documentation for Petroleum Impacted Sites Sept. 2003
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 7 - Groundwater Analytical Results - VOC Parameters
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				MW09-1	MW09-2	MW09-3	MW09-4	MW09-5	MW09-6	MW09-7	MW09-8	MW09-9
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**									
Benzene	370	5	1900	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	NV	5	50000	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromoform	NV	5	840	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	NV	0.9	3.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	13.3	0.5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	1.3	15	500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroethane	NV	NV	NV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	1.8	0.5	430	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	NV	NV	NV	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	NV	0.5	50000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m-Dichlorobenzene	0.7	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
o-Dichlorobenzene	150	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
p-Dichlorobenzene	26	1	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	NV	70	9000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	100	5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	NV	0.66	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	NV	70	70	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethene	NV	100	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	NV	0.7	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
c-1,3-dichloropropene	NV	1.4	3.8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
t-1,3-dichloropropene	NV	1.4	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	28000	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylene Dibromide	NV	1	3.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	98.1	50	50000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene	72	4	940	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	NV	5	6.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	NV	1	22	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Tetrachloroethene	111	5	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	2.0	0.8	5900	<0.5	<0.5	6.5	128	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	NV	10	200	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	NV	5	16000	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	21	20	50	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Vinyl Chloride	NV	0.5	0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Xylenes	NV	20	5600	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 7 - Groundwater Analytical Results - VOC Parameters
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-10**	**MW09-11**	**MW09-12**	**MW09-13**	**MW09-14**	**MW09-15**	**MW09-150**	**MW09-18**
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	06-Mar-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**							**Dup of MW09-15**	
Benzene	370	5	1900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	34.1
Bromodichloromethane	NV	5	50000	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromoform	NV	5	840	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	NV	0.9	3.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	13.3	0.5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	1.3	15	500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.7
Chloroethane	NV	NV	NV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	1.8	0.5	430	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	NV	NV	NV	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	NV	0.5	50000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m-Dichlorobenzene	0.7	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
o-Dichlorobenzene	150	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
p-Dichlorobenzene	26	1	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	NV	70	9000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	100	5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	NV	0.66	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	NV	70	70	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethene	NV	100	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	NV	0.7	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
c-1,3-dichloropropene	NV	1.4	3.8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
t-1,3-dichloropropene	NV	1.4	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	28000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	30.1
Ethylene Dibromide	NV	1	3.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	98.1	50	50000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene	72	4	940	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	NV	5	6.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	NV	1	22	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Tetrachloroethene	111	5	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	2.0	0.8	5900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	50.9
1,1,1-Trichloroethane	NV	10	200	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	NV	5	16000	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	21	20	50	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Vinyl Chloride	NV	0.5	0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Xylenes	NV	20	5600	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	112.2

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed
* detection limit exceeds criterion

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 7 - Groundwater Analytical Results - VOC Parameters
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-20**	**MW09-21**	**MW09-22**	**MW09-220**	**MW09-23**	**MW09-24**	**MW09-25**
Sample Date				05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
Parameter (ug/L)	**CCME Criteria [1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**				**Duplicate of MW09-22**			
Benzene	370	5	1900	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	NV	5	50000	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Bromoform	NV	5	840	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	NV	0.9	3.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	13.3	0.5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	1.3	15	500	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chloroethane	NV	NV	NV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	1.8	0.5	430	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	NV	NV	NV	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	NV	0.5	50000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m-Dichlorobenzene	0.7	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
o-Dichlorobenzene	150	2.5	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
p-Dichlorobenzene	26	1	7600	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	NV	70	9000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	100	5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	NV	0.66	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	NV	70	70	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethene	NV	100	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	NV	0.7	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
c-1,3-dichloropropene	NV	1.4	3.8	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
t-1,3-dichloropropene	NV	1.4	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	90	2.4	28000	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylene Dibromide	NV	1	3.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	98.1	50	50000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Styrene	72	4	940	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	NV	5	6.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	NV	1	22	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Tetrachloroethene	111	5	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	2.0	0.8	5900	<0.5	5.9	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	NV	10	200	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	NV	5	16000	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	21	20	50	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Vinyl Chloride	NV	0.5	0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Xylenes	NV	20	5600	1	1	0.9	<1.0	<1.0	<1.0	<1.0

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
NA - not analyzed
* detection limit exceeds criterion

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 8 : Groundwater Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-1**	**MW09-2**	**MW09-3**	**MW09-4**	**MW09-5**	**MW09-6**	**MW09-7**	**MW09-8**
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter (ug/L)	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								
Acenaphthene	5.8	1	1700	<0.05	<0.05	0.14	1.09	0.4	0.29	0.17	1.14
Acenaphthylene	NV	1	2000	<0.05	<0.05	0.25	0.38	0.17	0.8	0.24	1.33
Anthracene	0.012	0.005	12	0.04	0.03	0.12	0.08	0.05	0.65	0.62	4.02
Benzo[a]anthracene	0.018	0.1	5	0.05	0.07	0.21	0.08	0.07	0.54	1.05	**8.6**
Benzo[a]pyrene	0.015	0.005	1.9	0.02	0.03	0.13	0.04	0.03	0.85	1.02	**8.04**
Benzo[b]fluoranthene	NV	0.05	7	<0.05	<0.05	0.18	<0.05	0.05	1.11	1.25	**10.6**
Benzo[ghi]perylene	NV	0.1	0.2	<0.05	<0.05	0.13	<0.05	<0.05	**0.82**	**0.65**	**4.42**
Benzo[k]fluoranthene	NV	0.05	0.4	<0.05	<0.05	0.1	<0.05	<0.05	**0.45**	**0.68**	**5.96**
Biphenyl	NV	1	1700	0.05	<0.05	0.28	0.2	<0.05	0.19	<0.05	0.25
Chrysene	NV	0.05	3	<0.05	<0.05	0.23	0.05	0.05	0.69	1.19	**9.33**
Dibenzo[a,h]anthracene	NV	0.1	0.25	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	0.18	**0.98**
Fluoranthene	0.04	1	130	0.05	0.08	0.45	0.13	0.17	0.71	1.81	13.2
Fluorene	3	1	290	<0.05	<0.05	0.22	1.59	0.43	0.66	0.21	1.54
Indeno[1,2,3-cd]pyrene	NV	0.1	0.27	<0.05	<0.05	0.07	<0.05	<0.05	**0.59**	**0.56**	**4.06**
1-Methylnaphthalene	NV	2.5	13000	<0.05	<0.05	0.46	19.9	3.27	4.88	0.08	3.43
2-Methylnaphthalene	NV			0.05	0.05	0.52	4.63	1.14	2.35	0.1	5.7
Naphthalene	1.1	7	5900	0.11	0.06	0.54	4.1	1.12	0.91	0.3	5.55
Phenanthrene	0.4	1	63	0.12	0.12	0.58	0.77	0.38	0.9	1.37	10.9
Pyrene	0.025	0.05	40	0.05	0.07	0.49	0.12	0.17	0.81	1.6	12
PCBs, total	NV	0.1	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
na not analyzed
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 8 : Groundwater Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-9**	**MW09-10**	**MW09-11**	**MW09-12**	**MW09-13**	**MW09-14**	**MW09-15**	**MW09-150**
Sample Date				21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter (ug/L)	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								**Dup of MW09-15**
Acenaphthene	5.8	1	1700	0.5	7.13	3.12	0.25	<0.05	0.05	0.06	<0.05
Acenaphthylene	NV	1	2000	0.59	4.1	11.5	0.68	0.18	<0.05	<0.05	<0.05
Anthracene	0.012	0.005	12	1.59	3.99	5.1	0.71	0.19	0.02	<0.01*	0.01
Benzo[a]anthracene	0.018	0.1	5	2.71	**7.43**	**7.82**	1.72	0.44	0.07	<0.01	0.04
Benzo[a]pyrene	0.015	0.005	1.9	**2.59**	**6.23**	**7.56**	1.65	0.45	0.04	<0.01*	<0.01*
Benzo[b]fluoranthene	NV	0.05	7	3.38	**10.1**	**7.98**	2.64	0.6	0.07	<0.05	<0.05
Benzo[ghi]perylene	NV	0.1	0.2	**1.57**	**3.95**	**4.82**	**1.11**	**0.6**	<0.05	<0.05	<0.05
Benzo[k]fluoranthene	NV	0.05	0.4	**1.77**	**5.05**	**4.02**	**1.02**	0.22	<0.05	<0.05	<0.05
Biphenyl	NV	1	1700	0.1	<1.00	1.31	0.09	<0.05	<0.05	<0.05	<0.05
Chrysene	NV	0.05	3	**3.02**	**8.44**	**8.39**	2.03	0.51	0.06	<0.05	<0.05
Dibenzo[a,h]anthracene	NV	0.1	0.25	**0.38**	<1.00*	**0.71**	0.25	0.11	<0.05	<0.05	<0.05
Fluoranthene	0.04	1	130	4.34	11.1	19	2.57	0.62	0.11	0.03	0.05
Fluorene	3	1	290	0.69	11.6	6.53	0.3	0.12	<0.05	<0.05	<0.05
Indeno[1,2,3-cd]pyrene	NV	0.1	0.27	**1.39**	**3.07**	**3.3**	**0.88**	0.27	<0.05	<0.05	<0.05
1-Methylnaphthalene	NV	2.5	13000	0.33	115	12.4	0.22	0.23	<0.05	<0.05	<0.05
2-Methylnaphthalene	NV			0.35	150	11.8	0.3	0.24	0.05	<0.05	<0.05
Naphthalene	1.1	7	5900	0.77	63.8	8.34	0.66	0.32	0.1	0.07	<0.05
Phenanthrene	0.4	1	63	3.86	14.4	19.9	2.18	0.69	0.12	0.05	0.05
Pyrene	0.025	0.05	40	3.8	12.2	20.4	2.48	0.67	0.11	0.03	0.05
PCBs, total	NV	0.1	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
na not analyzed
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 8 : Groundwater Analytical Results - Polycyclic Aromatic Hydrocarbons & PCBs
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID				**MW09-18**	**MW09-20**	**MW09-21**	**MW09-22**	**MW09-220**	**MW09-23**	**MW09-24**	**MW09-25**
Sample Date				21-Jan-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
Parameter (ug/L)	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**					**Duplicate of MW09-22**			
Acenaphthene	5.8	1	1700	NA	0.96	0.27	0.69	0.66	0.08	1.68	0.23
Acenaphthylene	NV	1	2000	NA	0.25	0.15	0.72	0.48	0.29	0.26	0.12
Anthracene	0.012	0.005	12	NA	0.09	0.23	0.6	0.43	0.27	1.74	0.09
Benzo[a]anthracene	0.018	0.1	5	NA	0.17	0.3	0.94	0.59	1.1	2.27	0.26
Benzo[a]pyrene	0.015	0.005	1.9	NA	0.14	0.24	0.97	0.61	1.12	**2**	0.24
Benzo[b]fluoranthene	NV	0.05	7	NA	0.25	0.33	1.51	0.88	1.69	2.62	0.36
Benzo[ghi]perylene	NV	0.1	0.2	NA	0.14	0.16	**0.75**	**0.48**	**0.82**	**1.1**	0.18
Benzo[k]fluoranthene	NV	0.05	0.4	NA	0.09	0.19	**0.72**	**0.3**	**0.65**	**1.34**	0.18
Biphenyl	NV	1	1700	NA	0.15	0.1	0.14	<0.05	<0.05	0.24	<0.05
Chrysene	NV	0.05	3	NA	0.19	0.31	1.13	0.73	1.2	2.61	0.31
Dibenzo[a,h]anthracene	NV	0.1	0.25	NA	<0.05	<0.05	0.07	0.08	0.07	0.2	<0.05
Fluoranthene	0.04	1	130	NA	0.28	0.55	1.8	1.23	1.16	4.43	0.42
Fluorene	3	1	290	NA	1.44	0.26	1.2	1.07	0.06	1.28	0.13
Indeno[1,2,3-cd]pyrene	NV	0.1	0.27	NA	0.09	0.13	**0.61**	**0.38**	**0.49**	**0.88**	0.13
1-Methylnaphthalene	NV	2.5	13000	NA	18.3	0.41	5.05	5.29	<0.05	1.01	0.65
2-Methylnaphthalene	NV			NA	7.39	0.39	0.85	0.75	0.05	1.1	0.15
Naphthalene	1.1	7	5900	NA	5.26	0.58	1	0.94	0.08	2.68	0.29
Phenanthrene	0.4	1	63	NA	0.64	0.83	1.89	1.51	0.52	5.89	0.34
Pyrene	0.025	0.05	40	NA	0.31	0.51	1.65	1.09	1.09	4.18	0.39
PCBs, total	NV	0.1	0.2	NA	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
na not analyzed
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above criteria

Table 9 - Groundwater Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID					MW09-1	MW09-2	MW09-3	MW09-4	MW09-5	MW09-6	MW09-7	MW09-8
Sample Date					21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter	**Units**	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								
Antimony	ug/L	NV	6	16000	0.5	1.3	1.7	1	<0.5	0.6	0.6	<0.5
Arsenic	ug/L	5	25	480	1.0	1.0	1.0	2.0	1.0	<1	<1	<1
Barium	ug/L	NV	NV	23000	70	23	64	117	96	18	13	15
Beryllium	ug/L	NV	4	53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	ug/L	NV	200	50000	218	67	177	65.3	51.6	14.3	<10.0	13.4
Cadmium	ug/L	0.017	0.5	11	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*
Total Chromium	ug/L	0.9	8.9	2000	5	2	2	4	1	1	<1	<1
Chromium VI	ug/L	1	10	110	<10*	<10*	<10*	<10*	<10*	<10*	<10*	<10*
Cobalt	ug/L	NV	0.9	100	1.2	0.6	0.6	1.3	2.0	0.5	<0.5	<0.5
Copper	ug/L	4	2.5	23	6.8	6.1	5.7	3.7	0.8	3.0	5.6	4.9
Iron	ug/L	300	NV	NV	<100	<100	<100	<100	<100	<100	<100	<100
Lead	ug/L	7	1	32	<0.1	<0.1	0.2	<0.1	<0.1	0.3	0.6	0.5
Magnesium	ug/L	NV	NV	NV	27700	12100	24600	16500	13900	3380	2440	3510
Manganese	ug/L	NV	NV	NV	30	21	31	925	1200	138	<5	27
Mercury	ug/L	0.026	0.02	0.12	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*
Molybdenum	ug/L	NV	40	7300	7	33	140	7	6	2	<1	2
Nickel	ug/L	NV	25	1600	6	4	5	5	5	2	1	1
Selenium	ug/L	1	5	50	<1	4	5	<1	<1	<1	<1	<1
Silver	ug/L	0.1	0.25	1.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sodium	ug/L	NV	NV	NV	267000	53300	71300	45600	30700	4240	4780	8210
Thallium	ug/L	0.8	0.5	400	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	ug/L	NV	6	200	3	3	2	7	<1	<1	<1	<1
Zinc	ug/L	30	20	1100	47	<10	13	12	<10	<10	<10	<10

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
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na not analyzed
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above CCME criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 9 - Groundwater Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID					MW09-9	MW09-10	MW09-11	MW09-12	MW09-13	MW09-14	MW09-15	MW09-150
Sample Date					21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
Parameter	**Units**	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**								**Dup of MW09-15**
Antimony	ug/L	NV	6	16000	0.8	<0.5	0.6	<0.5	<0.5	0.6	<0.5	<0.5
Arsenic	ug/L	5	25	480	3.0	<1	3.0	<1	<1	<1	<1	<1
Barium	ug/L	NV	NV	23000	6	10	8	10	10	9	10	10
Beryllium	ug/L	NV	4	53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	ug/L	NV	200	50000	18.6	<10.0	12	<10.0	<10.0	<10.0	<10.0	<10.0
Cadmium	ug/L	0.017	0.5	11	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*
Total Chromium	ug/L	0.9	8.9	2000	1	<1	1	<1	<1	<1	<1	<1
Chromium VI	ug/L	1	10	110	<10*	<10*	<10*	<10*	<10*	<10*	<10*	<10*
Cobalt	ug/L	NV	0.9	100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	ug/L	4	2.5	23	**41.6**	3.8	8.3	5.3	4.2	4.0	3.0	2.6
Iron	ug/L	300	NV	NV	<100	<100	<100	<100	<100	<100	<100	<100
Lead	ug/L	7	1	32	0.2	0.2	0.2	0.5	0.2	0.2	0.1	0.4
Magnesium	ug/L	NV	NV	NV	537	3280	348	2360	3030	2660	2340	2350
Manganese	ug/L	NV	NV	NV	<5	66	<5	<5	44	<5	<5	<5
Mercury	ug/L	0.026	0.02	0.12	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*
Molybdenum	ug/L	NV	40	7300	5	1	5	<1	9	<1	<1	<1
Nickel	ug/L	NV	25	1600	1	1	3	1	2	1	1	1
Selenium	ug/L	1	5	50	<1	<1	<1	<1	<1	<1	<1	<1
Silver	ug/L	0.1	0.25	1.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sodium	ug/L	NV	NV	NV	4830	4590	4980	3910	5320	4110	4000	4110
Thallium	ug/L	0.8	0.5	400	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	ug/L	NV	6	200	6	<1	16	<1	<1	<1	<1	<1
Zinc	ug/L	30	20	1100	<10	<10	<10	<10	<10	<10	<10	<10

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
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na not analyzed
Shaded values exceed Federal Criteria
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NV - no value
* Detection limit is above CCME criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Table 9 - Groundwater Analytical Results - Metals
NCC - Property Asset #96189 Richmond Landing, Ottawa

Sample ID					MW09-18	MW09-20	MW09-21	MW09-22	MW09-220	MW09-23	MW09-24	MW09-25
Sample Date					21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09		21-Jan-09	21-Jan-09	21-Jan-09
Parameter	**Units**	**CCME Criteria[1]**	**MOE Criteria Table 1 [2]**	**MOE Criteria Table 3 [3]**					**Duplicate of MW09-22**			
Antimony	ug/L	NV	6	16000	NA	<1	<1	<1	<1	<1	<1	<1
Arsenic	ug/L	5	25	480	NA	<10*	<10*	<10*	<10*	<10*	<10*	<10*
Barium	ug/L	NV	NV	23000	NA	14	96	<10	<10	17	11	<10
Beryllium	ug/L	NV	4	53	NA	<1	<1	<1	<1	<1	<1	<1
Boron	ug/L	NV	200	50000	NA	<50	<50	<50	<50	<50	<50	<50
Cadmium	ug/L	0.017	0.5	11	NA	<1*	<1*	<1*	<1*	<1*	<1*	<1*
Total Chromium	ug/L	0.9	8.9	2000	NA	<50*	<50*	<50*	<50*	<50*	<50*	<50*
Chromium VI	ug/L	1	10	110	NA	<10	<10	<10	<10	<10	<10	<10
Cobalt	ug/L	NV	0.9	100	NA	<5*	<5*	<5*	<5*	<5*	<5*	<5*
Copper	ug/L	4	2.5	23	NA	<5*	7.0	<5*	<5*	6.0	6.0	7.0
Iron	ug/L	300	NV	NV	NA	NA	NA	NA	NA	NA	NA	NA
Lead	ug/L	7	1	32	NA	<1	4	<1	<1	<1	<1	<1
Magnesium	ug/L	NV	NV	NV	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	ug/L	NV	NV	NV	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	ug/L	0.026	0.02	0.12	NA	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*
Molybdenum	ug/L	NV	40	7300	NA	<5	5	<5	<5	<5	<5	<5
Nickel	ug/L	NV	25	1600	NA	<5	8	<5	<5	<5	<5	<5
Selenium	ug/L	1	5	50	NA	<5*	<5*	<5*	<5*	<5*	<5*	<5*
Silver	ug/L	0.1	0.25	1.2	NA	<1*	<1*	<1*	<1*	<1*	<1*	<1*
Sodium	ug/L	NV	NV	NV	NA	6180	13400	5580	5070	8760	6270	7380
Thallium	ug/L	0.8	0.5	400	NA	<1*	<1*	<1*	<1*	<1*	<1*	<1*
Vanadium	ug/L	NV	6	200	NA	<10*	<10*	<10*	<10*	<10*	<10*	<10*
Zinc	ug/L	30	20	1100	NA	<20	<20	<20	<20	<20	<20	<20

Notes:
1) CCME *Canadian Environmental Quality Guidelines. Chapter 4 Freshwater Aquatic Life*. Dec. 2007
2) MOE Table 1: Full Depth Background Site Standards, March 2004
3) MOE Table 3: Full Depth Generic Site Standards in a Non-Potable Ground Water Condition Soil Residential/Parkland Property Use March 2004
na not analyzed
Shaded values exceed Federal Criteria
Underline - concentration exceeds MOE Table 1 criteria
Bold - concentration exceeds MOE Table 3 criteria
NV - no value
* Detection limit is above CCME criteria

Data Entered: KL
Data Verified: MGM
Criteria Entered: KL
Criteria Verified: MGM
Comparison Verified: MGM

Appendix D
Laboratory Certificates of Analysis

PARACEL LABORATORIES LTD.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 54721

Report Date: 13-Jan-2009
Order Date: 7-Jan-2009
Order #: 0902082

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0902082-01	MW09-7 SS1
0902082-02	MW09-7 SS4
0902082-03	MW09-5 SS1
0902082-04	MW09-5A SS5
0902082-05	MW09-6 SS1
0902082-06	MW09-6 SS2
0902082-07	MW09-9 SS1
0902082-08	MW09-9 SS3
0902082-09	MW09-11 SS1
0902082-10	MW09-11 SS2

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	9-Jan-09	9-Jan-09
CCME PHC F1	CWS Tier 1 - P&T GC-FID	8-Jan-09	9-Jan-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	8-Jan-09	9-Jan-09
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	12-Jan-09	12-Jan-09
Mercury	EPA 7471A - CVAA, digestion	9-Jan-09	12-Jan-09
Metals	EPA 6020 - Digestion - ICP-MS	9-Jan-09	9-Jan-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	9-Jan-09	9-Jan-09
PCBs, total	SW846 8080 - GC-ECD	9-Jan-09	9-Jan-09
Solids, %	Gravimetric, calculation	8-Jan-09	8-Jan-09
VOCs	EPA 8260 - P&T GC-MS	8-Jan-09	12-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-7 SS1	MW09-7 SS4	MW09-5 SS1	MW09-5A SS5
	Sample Date:	06-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09
	Sample ID:	0902082-01	0902082-02	0902082-03	0902082-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	77.1	93.4	90.1	74.4
Metals					
Antimony	1 ug/g dry	<1	2	<1	<1
Arsenic	1 ug/g dry	<1	2	<1	<1
Barium	10 ug/g dry	93	219	93	186
Beryllium	0.5 ug/g dry	<0.5	0.7	<0.5	0.9
Boron, available	0.5 ug/g dry	0.5	1.3	0.6	0.8
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	21	18	17	38
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	8	5	11
Copper	5 ug/g dry	14	40	18	14
Iron	200 ug/g dry	12200	20200	13100	30500
Lead	1 ug/g dry	19	82	49	42
Mercury	0.1 ug/g dry	<0.1	0.2	<0.1	0.1
Molybdenum	1 ug/g dry	1	1	<1	<1
Nickel	5 ug/g dry	11	18	13	25
Selenium	1 ug/g dry	<1	<1	<1	1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	28	10	16	31
Zinc	20 ug/g dry	33	61	44	45
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-7 SS1	MW09-7 SS4	MW09-5 SS1	MW09-5A SS5
	Sample Date:	06-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09
	Sample ID:	0902082-01	0902082-02	0902082-03	0902082-04
	MDL/Units	Soil	Soil	Soil	Soil
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	122%	130%	123%	130%
Dibromofluoromethane	Surrogate	104%	104%	108%	102%

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-7 SS1	MW09-7 SS4	MW09-5 SS1	MW09-5A SS5
	Sample Date:	06-Jan-09	06-Jan-09	06-Jan-09	06-Jan-09
	Sample ID:	0902082-01	0902082-02	0902082-03	0902082-04
	MDL/Units	Soil	Soil	Soil	Soil
Toluene-d8	Surrogate	112%	111%	110%	109%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	77	<10	67
F3 PHCs (C16-C34)	10 ug/g dry	<10	237	229	57
F4 PHCs (C34-C50)	10 ug/g dry	<10	32	191	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.05	0.04	0.02
Acenaphthylene	0.02 ug/g dry	0.02	0.09	0.09	<0.02
Anthracene	0.02 ug/g dry	0.05	0.24	0.21	<0.02
Benzo[a]anthracene	0.02 ug/g dry	0.14	0.48	0.47	<0.02
Benzo[a]pyrene	0.02 ug/g dry	0.11	0.40	0.38	<0.02
Benzo[b]fluoranthene	0.02 ug/g dry	0.14	0.54	0.51	<0.02
Benzo[g,h,i]perylene	0.02 ug/g dry	0.06	0.26	0.23	<0.02
Benzo[k]fluoranthene	0.02 ug/g dry	0.08	0.24	0.26	<0.02
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
Chrysene	0.02 ug/g dry	0.15	0.53	0.51	<0.02
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	0.05	0.05	<0.02
Fluoranthene	0.02 ug/g dry	0.24	0.86	0.76	<0.02
Fluorene	0.02 ug/g dry	0.02	0.08	0.07	0.04
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.05	0.22	0.20	<0.02
1-Methylnaphthalene	0.02 ug/g dry	<0.02	0.05	0.02	0.29
2-Methylnaphthalene	0.02 ug/g dry	<0.02	0.05	0.03	0.25
Naphthalene	0.02 ug/g dry	0.02	0.05	0.04	0.10
Phenanthrene	0.02 ug/g dry	0.16	0.75	0.57	0.02
Pyrene	0.02 ug/g dry	0.23	0.79	0.71	<0.02
2-Fluorobiphenyl	Surrogate	67.0%	73.3%	65.2%	72.2%
Terphenyl-d14	Surrogate	65.2%	65.4%	58.4%	65.1%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	77.6%	103%	90.0%	81.6%

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

	Client ID:	MW09-6 SS1	MW09-6 SS2	MW09-9 SS1	MW09-9 SS3
	Sample Date:	06-Jan-09	06-Jan-09	07-Jan-09	07-Jan-09
	Sample ID:	0902082-05	0902082-06	0902082-07	0902082-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	87.8	81.3	80.2	82.4
Metals					
Antimony	1 ug/g dry	<1	<1	1	7
Arsenic	1 ug/g dry	<1	<1	<1	<1
Barium	10 ug/g dry	92	104	130	194
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	<0.5	0.5	0.6
Cadmium	0.5 ug/g dry	<0.5	<0.5	0.5	1.2
Chromium	5 ug/g dry	18	21	22	21
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	5	5	6
Copper	5 ug/g dry	8	13	31	166
Iron	200 ug/g dry	12100	14000	14300	17100
Lead	1 ug/g dry	18	27	89	220
Mercury	0.1 ug/g dry	<0.1	<0.1	0.1	0.4
Molybdenum	1 ug/g dry	1	<1	<1	<1
Nickel	5 ug/g dry	8	11	18	17
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	0.4
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	26	27	26	25
Zinc	20 ug/g dry	30	39	72	187
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-6 SS1	MW09-6 SS2	MW09-9 SS1	MW09-9 SS3
	Sample Date:	06-Jan-09	06-Jan-09	07-Jan-09	07-Jan-09
	Sample ID:	0902082-05	0902082-06	0902082-07	0902082-08
	MDL/Units	Soil	Soil	Soil	Soil
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	124%	117%	131%	112%
Dibromofluoromethane	Surrogate	105%	102%	105%	107%
Toluene-d8	Surrogate	110%	112%	110%	109%

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-6 SS1	MW09-6 SS2	MW09-9 SS1	MW09-9 SS3
	Sample Date:	06-Jan-09	06-Jan-09	07-Jan-09	07-Jan-09
	Sample ID:	0902082-05	0902082-06	0902082-07	0902082-08
	MDL/Units	Soil	Soil	Soil	Soil
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	75	31
F3 PHCs (C16-C34)	10 ug/g dry	<10	317	142	90
F4 PHCs (C34-C50)	10 ug/g dry	<10	10	10	16
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.04	2.69	0.41	0.28
Acenaphthylene	0.02 ug/g dry	0.06	2.84	0.26	0.50
Anthracene	0.02 ug/g dry	0.17	9.58	1.29	1.03
Benzo[a]anthracene	0.02 ug/g dry	0.37	12.2	2.00	2.33
Benzo[a]pyrene	0.02 ug/g dry	0.31	7.72	1.57	2.07
Benzo[b]fluoranthene	0.02 ug/g dry	0.40	10.5	2.07	2.77
Benzo[g,h,i]perylene	0.02 ug/g dry	0.18	2.99	0.86	1.26
Benzo[k]fluoranthene	0.02 ug/g dry	0.19	3.95	0.74	1.01
Biphenyl	0.02 ug/g dry	<0.02	<0.40 [1]	0.06	0.04
Chrysene	0.02 ug/g dry	0.38	13.5	1.97	2.47
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.04	0.56	0.28	0.37
Fluoranthene	0.02 ug/g dry	0.61	24.3	3.11	3.42
Fluorene	0.02 ug/g dry	0.06	4.00	0.72	0.39
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.16	2.31	0.83	1.18
1-Methylnaphthalene	0.02 ug/g dry	0.02	0.80	0.38	0.12
2-Methylnaphthalene	0.02 ug/g dry	0.03	0.96	0.25	0.14
Naphthalene	0.02 ug/g dry	0.03	1.03	0.45	0.23
Phenanthrene	0.02 ug/g dry	0.43	25.5	3.19	2.69
Pyrene	0.02 ug/g dry	0.55	22.3	2.74	3.26
2-Fluorobiphenyl	Surrogate	76.9%	76.1%	74.6%	69.5%
Terphenyl-d14	Surrogate	72.0%	83.2%	70.7%	68.0%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	100%	60.9%	85.8%	82.6%

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-11 SS1	MW09-11 SS2	-	-
	Sample Date:	07-Jan-09	07-Jan-09	-	-
	Sample ID:	0902082-09	0902082-10	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	76.0	90.6	-	-
Metals					
Antimony	1 ug/g dry	1	<1	-	-
Arsenic	1 ug/g dry	<1	<1	-	-
Barium	10 ug/g dry	138	89	-	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	-	-
Boron, available	0.5 ug/g dry	<0.5	<0.5	-	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	-	-
Chromium	5 ug/g dry	21	15	-	-
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	-	-
Cobalt	5 ug/g dry	5	5	-	-
Copper	5 ug/g dry	30	12	-	-
Iron	200 ug/g dry	12900	11200	-	-
Lead	1 ug/g dry	85	26	-	-
Mercury	0.1 ug/g dry	0.1	<0.1	-	-
Molybdenum	1 ug/g dry	<1	<1	-	-
Nickel	5 ug/g dry	15	10	-	-
Selenium	1 ug/g dry	<1	<1	-	-
Silver	0.3 ug/g dry	<0.3	<0.3	-	-
Thallium	1 ug/g dry	<1	<1	-	-
Vanadium	10 ug/g dry	23	20	-	-
Zinc	20 ug/g dry	77	32	-	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	-	-
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	-	-
Bromoform	0.002 ug/g dry	<0.002	<0.002	-	-
Bromomethane	0.003 ug/g dry	<0.003	<0.003	-	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	-	-
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
Chloroethane	0.005 ug/g dry	<0.005	<0.005	-	-
Chloroform	0.003 ug/g dry	<0.003	<0.003	-	-
Chloromethane	0.020 ug/g dry	<0.020	<0.020	-	-

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-11 SS1	MW09-11 SS2	-	-
	Sample Date:	07-Jan-09	07-Jan-09	-	-
	Sample ID:	0902082-09	0902082-10	-	-
	MDL/Units	Soil	Soil	-	-
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
Ethylbenzene	0.002 ug/g dry	0.020	<0.002	-	-
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	-	-
Styrene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
Toluene	0.002 ug/g dry	0.010	<0.002	-	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	-	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	0.021	<0.003	-	-
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	-	-
m,p-Xylenes	0.002 ug/g dry	0.125	<0.002	-	-
o-Xylene	0.002 ug/g dry	0.098	<0.002	-	-
4-Bromofluorobenzene	Surrogate	111%	113%	-	-
Dibromofluoromethane	Surrogate	111%	104%	-	-
Toluene-d8	Surrogate	106%	117%	-	-

Hydrocarbons

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-11 SS1	MW09-11 SS2	-	-
	Sample Date:	07-Jan-09	07-Jan-09	-	-
	Sample ID:	0902082-09	0902082-10	-	-
	MDL/Units	Soil	Soil	-	-
F1 PHCs (C6-C10)	10 ug/g dry	21	<10	-	-
F2 PHCs (C10-C16)	10 ug/g dry	362	<10	-	-
F3 PHCs (C16-C34)	10 ug/g dry	111	<10	-	-
F4 PHCs (C34-C50)	10 ug/g dry	21	<10	-	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.11	0.07	-	-
Acenaphthylene	0.02 ug/g dry	0.22	0.09	-	-
Anthracene	0.02 ug/g dry	0.35	0.23	-	-
Benzo[a]anthracene	0.02 ug/g dry	0.91	0.48	-	-
Benzo[a]pyrene	0.02 ug/g dry	0.83	0.43	-	-
Benzo[b]fluoranthene	0.02 ug/g dry	1.03	0.55	-	-
Benzo[g,h,i]perylene	0.02 ug/g dry	0.47	0.24	-	-
Benzo[k]fluoranthene	0.02 ug/g dry	0.42	0.29	-	-
Biphenyl	0.02 ug/g dry	0.13	<0.02	-	-
Chrysene	0.02 ug/g dry	1.01	0.51	-	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.12	0.07	-	-
Fluoranthene	0.02 ug/g dry	1.46	0.81	-	-
Fluorene	0.02 ug/g dry	0.15	0.10	-	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.43	0.23	-	-
1-Methylnaphthalene	0.02 ug/g dry	0.25	0.03	-	-
2-Methylnaphthalene	0.02 ug/g dry	0.33	0.04	-	-
Naphthalene	0.02 ug/g dry	0.31	0.07	-	-
Phenanthrene	0.02 ug/g dry	1.03	0.67	-	-
Pyrene	0.02 ug/g dry	1.39	0.74	-	-
2-Fluorobiphenyl	Surrogate	80.2%	62.9%	-	-
Terphenyl-d14	Surrogate	74.8%	61.4%	-	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	-	-
Decachlorobiphenyl	Surrogate	75.7%	87.2%	-	-

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Iron	ND	200	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.0749*		*ug/g*		*74.9*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*0.986*	*0.01*	*ug/g*		*74.0*	*32-156*			
Surrogate: Terphenyl-d14	*0.966*	*0.01*	*ug/g*		*72.5*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g						

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	ND	0.002	ug/g						
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.010	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: 4-Bromofluorobenzene	*0.167*		*ug/g*		*123*	*83-134*			
Surrogate: Dibromofluoromethane	*0.135*		*ug/g*		*99.2*	*78-124*			
Surrogate: Toluene-d8	*0.155*		*ug/g*		*114*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g dry	ND				32	
F2 PHCs (C10-C16)	ND	10	ug/g dry	ND				50	
F3 PHCs (C16-C34)	ND	10	ug/g dry	ND				50	
F4 PHCs (C34-C50)	ND	10	ug/g dry	ND				50	
Metals									
Antimony	2.4	1	ug/g dry	ND				26	QR-01
Arsenic	ND	1	ug/g dry	ND				35	
Barium	161	10	ug/g dry	156			3.2	34	
Beryllium	0.59	0.5	ug/g dry	0.69			15.4	25	
Boron, available	0.61	0.5	ug/g dry	0.60			2.2	35	
Cadmium	0.64	0.5	ug/g dry	ND				33	QR-01
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	27.5	5	ug/g dry	26.1			5.2	32	
Cobalt	12.5	5	ug/g dry	12.5			0.3	32	
Copper	27.2	5	ug/g dry	26.0			4.5	32	
Iron	28800	200	ug/g dry	28200			2.2	32	
Lead	18.8	1	ug/g dry	19.2			2.1	44	
Mercury	ND	0.1	ug/g dry	ND				35	
Molybdenum	ND	1	ug/g dry	ND				29	
Nickel	28.7	5	ug/g dry	27.8			3.2	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	35.0	10	ug/g dry	33.7			3.7	27	
Zinc	55.5	20	ug/g dry	56.2			1.2	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.108*		*ug/g dry*	*ND*	*94.9*	*40-147*			
Physical Characteristics									
% Solids	78.9	0.1	% by Wt.	77.9			1.3	25	
Semi-Volatiles									
Acenaphthene	0.592	0.04	ug/g dry	0.114			135.0	50	QR-04
Acenaphthylene	0.352	0.04	ug/g dry	0.216			47.8	50	
Anthracene	0.890	0.04	ug/g dry	0.350			87.2	50	QR-04
Benzo[a]anthracene	2.20	0.04	ug/g dry	0.905			83.2	50	QR-04
Benzo[a]pyrene	1.87	0.04	ug/g dry	0.833			76.7	50	QR-04
Benzo[b]fluoranthene	2.27	0.04	ug/g dry	1.03			75.6	50	QR-04
Benzo[g,h,i]perylene	1.02	0.04	ug/g dry	0.472			73.6	50	QR-04
Benzo[k]fluoranthene	1.13	0.04	ug/g dry	0.417			91.8	50	QR-04
Biphenyl	0.190	0.04	ug/g dry	0.129			38.3	50	
Chrysene	2.53	0.04	ug/g dry	1.01			86.1	50	QR-04
Dibenzo[a,h]anthracene	0.302	0.04	ug/g dry	0.121			85.2	50	QR-04
Fluoranthene	3.65	0.04	ug/g dry	1.46			85.6	50	QR-04
Fluorene	0.596	0.04	ug/g dry	0.149			120.0	50	QR-04
Indeno[1,2,3-cd]pyrene	0.944	0.04	ug/g dry	0.425			75.8	50	QR-04
1-Methylnaphthalene	0.419	0.04	ug/g dry	0.246			52.3	50	QR-04
2-Methylnaphthalene	0.576	0.04	ug/g dry	0.333			53.4	50	QR-04
Naphthalene	1.15	0.04	ug/g dry	0.313			115.0	50	QR-04
Phenanthrene	3.80	0.04	ug/g dry	1.03			114.0	50	QR-04
Pyrene	3.49	0.04	ug/g dry	1.39			86.2	50	QR-04
Surrogate: 2-Fluorobiphenyl	*1.34*	*0.02*	*ug/g dry*	*ND*	*76.6*	*32-156*			

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Terphenyl-d14	*1.25*	*0.02*	*ug/g dry*	*ND*	*71.5*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g dry	ND				50	
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	ND	0.002	ug/g dry	ND				34	
Methylene Chloride	ND	0.010	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	ND	0.002	ug/g dry	ND				35	
o-Xylene	ND	0.002	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*0.158*		*ug/g dry*	*ND*	*108*	*83-134*			
Surrogate: Dibromofluoromethane	*0.153*		*ug/g dry*	*ND*	*105*	*78-124*			
Surrogate: Toluene-d8	*0.162*		*ug/g dry*	*ND*	*111*	*76-118*			

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	96	10	ug/g	ND	95.7	80-120			
F2 PHCs (C10-C16)	64	10	ug/g	ND	80.1	61-129			
F3 PHCs (C16-C34)	152	10	ug/g	ND	75.9	61-129			
F4 PHCs (C34-C50)	88	10	ug/g	ND	73.3	61-129			
Metals									
Antimony	44.5		ug/L	0.3	88.4	78-126			
Arsenic	43.2		ug/L	ND	86.6	80-120			
Barium	117		ug/L	62.2	110	83-116			
Beryllium	32.1		ug/L	0.28	63.7	72-123			QS-02
Boron, available	4.24	0.5	ug/g	0.60	72.8	70-122			
Cadmium	48.1		ug/L	0.20	95.7	78-118			
Chromium (VI)	5.2	0.4	ug/g	ND	104	89-123			
Chromium	56.3		ug/L	10.4	91.7	80-124			
Cobalt	49.0		ug/L	5.0	87.9	78-125			
Copper	53.2		ug/L	10.4	85.6	75-123			
Iron	12700		ug/L	11300	142	66-119			QS-02
Lead	57.1		ug/L	7.7	98.9	80-120			
Mercury	1.63	0.1	ug/g	ND	109	72-128			
Molybdenum	45.2		ug/L	0.2	90.0	82-119			
Nickel	55.2		ug/L	11.1	88.1	78-119			
Selenium	45.4		ug/L	ND	90.7	81-125			
Silver	46.1		ug/L	0.07	92.1	70-128			
Thallium	51.8		ug/L	0.08	103	82-127			
Vanadium	61.1		ug/L	13.5	95.2	82-123			
Zinc	56.2		ug/L	22.5	67.4	78-130			QS-02
PCBs									
PCBs, total	0.388	0.05	ug/g	ND	97.1	58-147			
Surrogate: Decachlorobiphenyl	*0.0839*		*ug/g*		*83.9*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.128	0.02	ug/g	ND	76.8	31-121			
Acenaphthylene	0.134	0.02	ug/g	ND	80.1	26-124			
Anthracene	0.161	0.02	ug/g	ND	96.4	29-128			
Benzo[a]anthracene	0.155	0.02	ug/g	ND	93.1	29-129			
Benzo[a]pyrene	0.164	0.02	ug/g	ND	98.6	29-111			
Benzo[b]fluoranthene	0.123	0.02	ug/g	ND	73.8	26-111			
Benzo[g,h,i]perylene	0.124	0.02	ug/g	ND	74.6	23-128			
Benzo[k]fluoranthene	0.145	0.02	ug/g	ND	86.9	23-135			
Biphenyl	0.129	0.02	ug/g	ND	77.3	31-107			
Chrysene	0.175	0.02	ug/g	ND	105	28-136			
Dibenzo[a,h]anthracene	0.105	0.02	ug/g	ND	63.1	20-131			
Fluoranthene	0.143	0.02	ug/g	ND	85.6	24-131			
Fluorene	0.159	0.02	ug/g	ND	95.6	28-123			
Indeno[1,2,3-cd]pyrene	0.106	0.02	ug/g	ND	63.6	20-128			
1-Methylnaphthalene	0.0925	0.02	ug/g	ND	55.5	24-127			
2-Methylnaphthalene	0.0967	0.02	ug/g	ND	58.0	21-127			
Naphthalene	0.0932	0.02	ug/g	ND	55.9	29-118			
Phenanthrene	0.152	0.02	ug/g	ND	91.0	34-108			
Pyrene	0.150	0.02	ug/g	ND	90.1	29-131			
Surrogate: 2-Fluorobiphenyl	*0.931*	0.01	*ug/g*		*69.8*	*32-156*			
Surrogate: Terphenyl-d14	*0.885*	0.01	*ug/g*		*66.4*	*39-146*			
Volatiles									
Benzene	0.0615	0.002	ug/g	ND	90.4	55-141			

PARACEL LABORATORIES LTD.

Order #: 0902082

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	0.0661	0.002	ug/g	ND	97.2	52-139			
Bromoform	0.0722	0.002	ug/g	ND	106	52-170			
Bromomethane	0.0873	0.003	ug/g	ND	128	32-138			
Carbon Tetrachloride	0.0648	0.002	ug/g	ND	95.2	49-149			
Chlorobenzene	0.0648	0.002	ug/g	ND	95.3	64-137			
Chloroethane	0.0501	0.005	ug/g	ND	73.6	39-152			
Chloroform	0.0677	0.003	ug/g	ND	99.6	58-138			
Chloromethane	0.0473	0.020	ug/g	ND	69.5	24-163			
Dibromochloromethane	0.0687	0.002	ug/g	ND	101	61-153			
1,2-Dibromoethane	0.0703	0.002	ug/g	ND	103	61-145			
1,2-Dichlorobenzene	0.0656	0.002	ug/g	ND	96.5	60-150			
1,3-Dichlorobenzene	0.0641	0.002	ug/g	ND	94.3	62-149			
1,4-Dichlorobenzene	0.0651	0.002	ug/g	ND	95.7	63-132			
1,1-Dichloroethane	0.0635	0.002	ug/g	ND	93.3	51-156			
1,2-Dichloroethane	0.0682	0.002	ug/g	ND	100	50-140			
1,1-Dichloroethylene	0.0549	0.002	ug/g	ND	80.8	43-153			
cis-1,2-Dichloroethylene	0.0619	0.002	ug/g	ND	91.1	58-145			
trans-1,2-Dichloroethylene	0.0579	0.003	ug/g	ND	85.2	51-145			
1,2-Dichloropropane	0.0672	0.002	ug/g	ND	98.9	56-136			
cis-1,3-Dichloropropylene	0.0699	0.002	ug/g	ND	103	54-141			
trans-1,3-Dichloropropylene	0.0725	0.002	ug/g	ND	107	61-140			
Ethylbenzene	0.0665	0.002	ug/g	ND	97.7	61-139			
Methylene Chloride	0.0600	0.010	ug/g	ND	88.2	58-149			
Styrene	0.0699	0.002	ug/g	ND	103	63-143			
1,1,1,2-Tetrachloroethane	0.0693	0.003	ug/g	ND	102	61-148			
1,1,2,2-Tetrachloroethane	0.0727	0.003	ug/g	ND	107	50-157			
Tetrachloroethylene	0.0622	0.002	ug/g	ND	91.5	51-145			
Toluene	0.0686	0.002	ug/g	ND	101	54-136			
1,1,1-Trichloroethane	0.0663	0.002	ug/g	ND	97.4	55-140			
1,1,2-Trichloroethane	0.0699	0.002	ug/g	ND	103	63-144			
Trichloroethylene	0.0651	0.003	ug/g	ND	95.7	52-135			
Trichlorofluoromethane	0.0587	0.005	ug/g	ND	86.3	37-155			
1,3,5-Trimethylbenzene	0.0646	0.003	ug/g	ND	95.0	61-151			
Vinyl chloride	0.0494	0.002	ug/g	ND	72.6	31-159			
m,p-Xylenes	0.130	0.002	ug/g	ND	95.8	61-139			
o-Xylene	0.0666	0.002	ug/g	ND	97.9	60-142			
Surrogate: 4-Bromofluorobenzene	*0.135*		*ug/g*		*99.1*	*83-134*			
Surrogate: Dibromofluoromethane	*0.136*		*ug/g*		*99.8*	*78-124*			
Surrogate: Toluene-d8	*0.133*		*ug/g*		*97.9*	*76-118*			

Certificate of Analysis

Report Date: 13-Jan-2009
Order Date:7-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- GEN07 : Elevated detection limit because of dilution required due to high target analyte concentration.
2- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.
3- QR-04 : Duplicate results exceeds RPD limits due to non-homogeneous matrix.
4- QS-02 : Spike level outside of control limits. Analysis batch accepted based on other QC included in the batch.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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www.paracellabs.com

Chain of Custody Record

№ 54721

Pg. ___ of ___

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTM00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: | | 1-day | | 2-day ☒ Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A–Air O–Other RDW–Regulated Drinking Water

Paracel Order # 0902082	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	PHC (F1 to F4)	PAH	Metals	PCBs									Hazardous? (Y/N)
1	MW09-7 SS1	S		1	Jan 6/09	X	X	X	X	X									N
2	MW09-7 SS4	↓		↓	↓	↓	↓	↓	↓	↓									↓
3	MW09-5a SS1																		
4	MW09-5a SS5																		
5	MW09-6 SS1																		
6	MW09-6 SS2				↓														
7	MW09-9 SS1				Jan 7/09														
8	MW09-9 SS3																		
9	MW09-11 SS1																		
10	MW09-11 SS2	↓		↓	↓	↓	↓	↓	↓	↓									↓

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 7/09 Time: 5:39	Date: Time:	Date: Jan 7/09 Time: 5:39	Date: Jan. 8/09 Time: 8:04

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 54710

Report Date: 16-Jan-2009
Order Date: 9-Jan-2009
Order #: 0903001

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0903001-01	MW09-12 SS1
0903001-02	MW09-12 SS6
0903001-03	MW09-14 SS1
0903001-04	MW09-14 SS100
0903001-05	MW09-14 SS3
0903001-06	MW09-15 SS1
0903001-07	MW09-15 SS100
0903001-08	MW09-15 SS4
0903001-09	MW09-13 SS1
0903001-10	MW09-13 SS5
0903001-11	MW09-10 SS1
0903001-12	MW09-10 SS100
0903001-13	MW09-10 SS2
0903001-14	MW09-4 SS1
0903001-15	MW09-4 SS10
0903001-16	MW09-8 SS1
0903001-17	MW09-8 SS6

Approved By: Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009

Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	14-Jan-09	14-Jan-09
CCME PHC F1	CWS Tier 1 - P&T GC-FID	12-Jan-09	14-Jan-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	13-Jan-09	13-Jan-09
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	15-Jan-09	15-Jan-09
Mercury	EPA 7471A - CVAA, digestion	15-Jan-09	15-Jan-09
Metals	EPA 6020 - Digestion - ICP-MS	15-Jan-09	15-Jan-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	14-Jan-09	15-Jan-09
PCBs, total	SW846 8080 - GC-ECD	13-Jan-09	13-Jan-09
Solids, %	Gravimetric, calculation	12-Jan-09	12-Jan-09
VOCs	EPA 8260 - P&T GC-MS	12-Jan-09	13-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-12 SS1	MW09-12 SS6	MW09-14 SS1	MW09-14 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-01	0903001-02	0903001-03	0903001-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	82.5	82.1	88.7	87.3
Metals					
Antimony	1 ug/g dry	2	3	<1	<1
Arsenic	1 ug/g dry	<1	4	2	2
Barium	10 ug/g dry	138	187	113	125
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	0.6	0.5
Chromium	5 ug/g dry	28	32	24	24
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	7	9	8	7
Copper	5 ug/g dry	19	29	25	26
Iron	200 ug/g dry	15000	24900	14500	14300
Lead	1 ug/g dry	39	58	86	102
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	0.1
Molybdenum	1 ug/g dry	1	1	2	2
Nickel	5 ug/g dry	16	27	28	21
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	35	33	33	33
Zinc	20 ug/g dry	46	56	51	66
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-12 SS1	MW09-12 SS6	MW09-14 SS1	MW09-14 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-01	0903001-02	0903001-03	0903001-04
	MDL/Units	Soil	Soil	Soil	Soil
Volatiles (continued)					
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	132%	111%	127%	131%
Dibromofluoromethane	Surrogate	112%	119%	116%	118%
Toluene-d8	Surrogate	110%	106%	109%	108%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	57	<10	10

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-12 SS1	MW09-12 SS6	MW09-14 SS1	MW09-14 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-01	0903001-02	0903001-03	0903001-04
	MDL/Units	Soil	Soil	Soil	Soil
Hydrocarbons (continued)					
F3 PHCs (C16-C34)	10 ug/g dry	242	57	51	140
F4 PHCs (C34-C50)	10 ug/g dry	45	<10	37	171
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.07	<0.02	0.05	0.40
Acenaphthylene	0.02 ug/g dry	0.10	<0.02	0.18	0.21
Anthracene	0.02 ug/g dry	0.28	<0.02	0.30	1.30
Benzo[a]anthracene	0.02 ug/g dry	0.63	0.02	0.67	2.00
Benzo[a]pyrene	0.02 ug/g dry	0.54	<0.02	0.62	1.61
Benzo[b]fluoranthene	0.02 ug/g dry	0.71	<0.02	0.83	2.28
Benzo[g,h,i]perylene	0.02 ug/g dry	0.31	<0.02	0.40	0.69
Benzo[k]fluoranthene	0.02 ug/g dry	0.41	<0.02	0.45	0.80
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	0.06
Chrysene	0.02 ug/g dry	0.68	<0.02	0.72	1.99
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.08	<0.02	0.10	0.24
Fluoranthene	0.02 ug/g dry	1.13	0.02	1.03	3.34
Fluorene	0.02 ug/g dry	0.09	<0.02	0.08	0.55
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.27	<0.02	0.37	0.73
1-Methylnaphthalene	0.02 ug/g dry	0.03	0.03	0.05	0.17
2-Methylnaphthalene	0.02 ug/g dry	0.03	0.03	0.06	0.19
Naphthalene	0.02 ug/g dry	0.03	0.02	0.06	0.18
Phenanthrene	0.02 ug/g dry	0.85	<0.02	0.71	3.92
Pyrene	0.02 ug/g dry	1.04	0.02	0.97	2.96
2-Fluorobiphenyl	Surrogate	69.1%	65.8%	65.6%	66.0%
Terphenyl-d14	Surrogate	70.6%	71.5%	68.6%	78.5%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	93.0%	94.2%	92.1%	94.2%

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-14 SS3	MW09-15 SS1	MW09-15 SS100	MW09-15 SS4
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-05	0903001-06	0903001-07	0903001-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	78.6	87.4	79.5	77.8
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	<1	<1	<1	2
Barium	10 ug/g dry	199	61	57	99
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	56	12	12	31
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	12	<5	<5	6
Copper	5 ug/g dry	30	11	11	13
Iron	200 ug/g dry	22400	9420	9030	16100
Lead	1 ug/g dry	22	28	32	23
Mercury	0.1 ug/g dry	0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	<1	<1	3
Nickel	5 ug/g dry	33	11	10	20
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	57	17	18	16
Zinc	20 ug/g dry	64	40	34	34
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-14 SS3	MW09-15 SS1	MW09-15 SS100	MW09-15 SS4
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-05	0903001-06	0903001-07	0903001-08
	MDL/Units	Soil	Soil	Soil	Soil
Volatiles (continued)					
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	120%	132%	126%	126%
Dibromofluoromethane	Surrogate	114%	120%	120%	122%
Toluene-d8	Surrogate	111%	108%	110%	108%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-14 SS3	MW09-15 SS1	MW09-15 SS100	MW09-15 SS4
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-05	0903001-06	0903001-07	0903001-08
	MDL/Units	Soil	Soil	Soil	Soil
Hydrocarbons (continued)					
F3 PHCs (C16-C34)	10 ug/g dry	<10	143	<10	<10
F4 PHCs (C34-C50)	10 ug/g dry	<10	76	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.02	0.02	<0.02
Acenaphthylene	0.02 ug/g dry	<0.02	0.02	0.02	<0.02
Anthracene	0.02 ug/g dry	<0.02	0.06	0.06	<0.02
Benzo[a]anthracene	0.02 ug/g dry	0.02	0.14	0.13	0.02
Benzo[a]pyrene	0.02 ug/g dry	<0.02	0.12	0.10	<0.02
Benzo[b]fluoranthene	0.02 ug/g dry	0.02	0.14	0.14	0.02
Benzo[g,h,i]perylene	0.02 ug/g dry	<0.02	0.06	0.05	<0.02
Benzo[k]fluoranthene	0.02 ug/g dry	<0.02	0.07	0.05	<0.02
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.02	0.15	0.14	0.02
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Fluoranthene	0.02 ug/g dry	0.02	0.24	0.24	0.04
Fluorene	0.02 ug/g dry	<0.02	0.02	0.02	<0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.05	0.04	<0.02
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	0.02	<0.02	<0.02
Naphthalene	0.02 ug/g dry	<0.02	0.03	<0.02	<0.02
Phenanthrene	0.02 ug/g dry	0.02	0.21	0.21	0.03
Pyrene	0.02 ug/g dry	0.02	0.23	0.21	0.03
2-Fluorobiphenyl	Surrogate	49.2%	62.9%	58.3%	52.6%
Terphenyl-d14	Surrogate	72.9%	71.9%	69.5%	72.0%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	89.4%	86.7%	114%	85.7%

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-13 SS1	MW09-13 SS5	MW09-10 SS1	MW09-10 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-09	0903001-10	0903001-11	0903001-12
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	84.7	74.0	84.8	81.5
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	<1	1	<1	<1
Barium	10 ug/g dry	112	115	104	103
Beryllium	0.5 ug/g dry	<0.5	0.6	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	23	22	24	23
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	5	7	<5	5
Copper	5 ug/g dry	18	11	12	12
Iron	200 ug/g dry	12600	16400	11700	12300
Lead	1 ug/g dry	85	79	10	13
Mercury	0.1 ug/g dry	<0.1	0.2	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	<1	<1	<1
Nickel	5 ug/g dry	14	16	11	12
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	34	12	31	31
Zinc	20 ug/g dry	50	40	30	33
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-13 SS1	MW09-13 SS5	MW09-10 SS1	MW09-10 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-09	0903001-10	0903001-11	0903001-12
	MDL/Units	Soil	Soil	Soil	Soil
Volatiles (continued)					
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	126%	132%	118%	128%
Dibromofluoromethane	Surrogate	122%	122%	123%	124%
Toluene-d8	Surrogate	108%	103%	108%	110%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	36	<10	15

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-13 SS1	MW09-13 SS5	MW09-10 SS1	MW09-10 SS100
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-09	0903001-10	0903001-11	0903001-12
	MDL/Units	Soil	Soil	Soil	Soil
Hydrocarbons (continued)					
F3 PHCs (C16-C34)	10 ug/g dry	91	279	138	228
F4 PHCs (C34-C50)	10 ug/g dry	<10	160	287	718
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.03	<0.02	0.06	0.05
Acenaphthylene	0.02 ug/g dry	0.04	<0.02	0.22	0.19
Anthracene	0.02 ug/g dry	0.12	<0.02	0.36	0.30
Benzo[a]anthracene	0.02 ug/g dry	0.22	0.02	1.04	0.66
Benzo[a]pyrene	0.02 ug/g dry	0.20	<0.02	1.00	0.64
Benzo[b]fluoranthene	0.02 ug/g dry	0.25	0.02	1.38	0.86
Benzo[g,h,i]perylene	0.02 ug/g dry	0.11	<0.02	0.50	0.32
Benzo[k]fluoranthene	0.02 ug/g dry	0.14	<0.02	0.66	0.41
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.04 [1]	<0.04 [1]
Chrysene	0.02 ug/g dry	0.24	0.02	1.12	0.71
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.02	<0.02	0.14	0.10
Fluoranthene	0.02 ug/g dry	0.44	0.02	1.53	1.06
Fluorene	0.02 ug/g dry	0.04	<0.02	0.08	0.07
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.10	<0.02	0.47	0.30
1-Methylnaphthalene	0.02 ug/g dry	0.02	<0.02	0.08	0.07
2-Methylnaphthalene	0.02 ug/g dry	0.02	0.02	0.11	0.08
Naphthalene	0.02 ug/g dry	0.02	<0.02	0.10	0.07
Phenanthrene	0.02 ug/g dry	0.38	0.02	0.85	0.71
Pyrene	0.02 ug/g dry	0.38	0.03	1.49	0.99
2-Fluorobiphenyl	Surrogate	66.5%	77.3%	85.0%	77.7%
Terphenyl-d14	Surrogate	78.9%	81.7%	90.2%	82.3%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	96.3%	107%	99.2%	103%

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-10 SS2	MW09-4 SS1	MW09-4 SS10	MW09-8 SS1
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-13	0903001-14	0903001-15	0903001-16
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	90.2	94.4	75.3	83.4
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	<1	2	<1	<1
Barium	10 ug/g dry	90	28	68	102
Beryllium	0.5 ug/g dry	<0.5	<0.5	0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	18	9	17	23
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	6	<5	<5	5
Copper	5 ug/g dry	22	7	7	18
Iron	200 ug/g dry	11900	8980	11000	11800
Lead	1 ug/g dry	59	12	19	14
Mercury	0.1 ug/g dry	0.1	<0.1	0.1	<0.1
Molybdenum	1 ug/g dry	<1	3	<1	1
Nickel	5 ug/g dry	14	11	15	12
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	24	18	<10	30
Zinc	20 ug/g dry	49	<20	<20	32
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-10 SS2	MW09-4 SS1	MW09-4 SS10	MW09-8 SS1
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-13	0903001-14	0903001-15	0903001-16
	MDL/Units	Soil	Soil	Soil	Soil
Volatiles (continued)					
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	0.039	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	0.011	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	130%	130%	86.1%	113%
Dibromofluoromethane	Surrogate	121%	121%	122%	116%
Toluene-d8	Surrogate	109%	110%	102%	113%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	67	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	10	1130	20
F3 PHCs (C16-C34)	10 ug/g dry	46	86	270	294

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-10 SS2	MW09-4 SS1	MW09-4 SS10	MW09-8 SS1
	Sample Date:	08-Jan-09	08-Jan-09	08-Jan-09	08-Jan-09
	Sample ID:	0903001-13	0903001-14	0903001-15	0903001-16
	MDL/Units	Soil	Soil	Soil	Soil
Hydrocarbons (continued)					
F4 PHCs (C34-C50)	10 ug/g dry	29	120	<10	149
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.47	0.07	0.18	0.12
Acenaphthylene	0.02 ug/g dry	0.66	0.24	0.06	0.37
Anthracene	0.02 ug/g dry	1.66	0.41	0.05	0.61
Benzo[a]anthracene	0.02 ug/g dry	2.77	0.87	0.16	1.21
Benzo[a]pyrene	0.02 ug/g dry	2.27	0.84	0.03	1.17
Benzo[b]fluoranthene	0.02 ug/g dry	3.05	1.15	0.03	1.67
Benzo[g,h,i]perylene	0.02 ug/g dry	0.98	0.40	<0.02	0.58
Benzo[k]fluoranthene	0.02 ug/g dry	1.12	0.50	0.02	0.77
Biphenyl	0.02 ug/g dry	0.06	0.02	<0.02	0.03
Chrysene	0.02 ug/g dry	2.71	0.92	0.05	1.30
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.37	0.12	<0.02	0.18
Fluoranthene	0.02 ug/g dry	4.13	1.28	0.10	1.80
Fluorene	0.02 ug/g dry	0.71	0.10	0.30	0.18
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	1.05	0.38	<0.02	0.59
1-Methylnaphthalene	0.02 ug/g dry	0.20	0.06	1.54	0.12
2-Methylnaphthalene	0.02 ug/g dry	0.21	0.10	0.12	0.19
Naphthalene	0.02 ug/g dry	0.36	0.08	0.13	0.16
Phenanthrene	0.02 ug/g dry	4.00	0.79	0.32	1.46
Pyrene	0.02 ug/g dry	3.74	1.24	0.10	1.68
2-Fluorobiphenyl	Surrogate	80.9%	74.2%	73.7%	73.0%
Terphenyl-d14	Surrogate	90.6%	78.8%	83.0%	80.4%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	96.9%	99.5%	86.9%	92.8%

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-8 SS6	-	-	-
	Sample Date:	08-Jan-09	-	-	-
	Sample ID:	0903001-17	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	82.1	-	-	-
Metals					
Antimony	1 ug/g dry	<1	-	-	-
Arsenic	1 ug/g dry	3	-	-	-
Barium	10 ug/g dry	158	-	-	-
Beryllium	0.5 ug/g dry	<0.5	-	-	-
Boron, available	0.5 ug/g dry	0.5	-	-	-
Cadmium	0.5 ug/g dry	<0.5	-	-	-
Chromium	5 ug/g dry	19	-	-	-
Chromium (VI)	0.4 ug/g dry	<0.4	-	-	-
Cobalt	5 ug/g dry	<5	-	-	-
Copper	5 ug/g dry	19	-	-	-
Iron	200 ug/g dry	10700	-	-	-
Lead	1 ug/g dry	54	-	-	-
Mercury	0.1 ug/g dry	<0.1	-	-	-
Molybdenum	1 ug/g dry	<1	-	-	-
Nickel	5 ug/g dry	17	-	-	-
Selenium	1 ug/g dry	<1	-	-	-
Silver	0.3 ug/g dry	<0.3	-	-	-
Thallium	1 ug/g dry	<1	-	-	-
Vanadium	10 ug/g dry	15	-	-	-
Zinc	20 ug/g dry	45	-	-	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	-	-	-
Bromodichloromethane	0.002 ug/g dry	<0.002	-	-	-
Bromoform	0.002 ug/g dry	<0.002	-	-	-
Bromomethane	0.003 ug/g dry	<0.003	-	-	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	-	-	-
Chlorobenzene	0.002 ug/g dry	<0.002	-	-	-
Chloroethane	0.005 ug/g dry	<0.005	-	-	-
Chloroform	0.003 ug/g dry	<0.003	-	-	-
Chloromethane	0.020 ug/g dry	<0.020	-	-	-
Dibromochloromethane	0.002 ug/g dry	<0.002	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	MW09-8 SS6	-	-	-
	Sample Date:	08-Jan-09	-	-	-
	Sample ID:	0903001-17	-	-	-
	MDL/Units	Soil	-	-	-
Volatiles (continued)					
1,2-Dibromoethane	0.002 ug/g dry	<0.002	-	-	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	-	-	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	-	-	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	-	-	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	-	-	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	-	-	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	-	-	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	-	-	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	-	-	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	-	-	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	-	-	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	-	-	-
Ethylbenzene	0.002 ug/g dry	<0.002	-	-	-
Methylene Chloride	0.010 ug/g dry	<0.010	-	-	-
Styrene	0.002 ug/g dry	<0.002	-	-	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	-	-	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	-	-	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	-	-	-
Toluene	0.002 ug/g dry	<0.002	-	-	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	-	-	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	-	-	-
Trichloroethylene	0.003 ug/g dry	<0.003	-	-	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	-	-	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	-	-	-
Vinyl chloride	0.002 ug/g dry	<0.002	-	-	-
m,p-Xylenes	0.002 ug/g dry	<0.002	-	-	-
o-Xylene	0.002 ug/g dry	<0.002	-	-	-
4-Bromofluorobenzene	Surrogate	111%	-	-	-
Dibromofluoromethane	Surrogate	116%	-	-	-
Toluene-d8	Surrogate	112%	-	-	-
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

	Client ID:	MW09-8 SS6	-	-	-
	Sample Date:	08-Jan-09	-	-	-
	Sample ID:	0903001-17	-	-	-
	MDL/Units	Soil	-	-	-
Hydrocarbons (continued)					
F2 PHCs (C10-C16)	10 ug/g dry	17	-	-	-
F3 PHCs (C16-C34)	10 ug/g dry	139	-	-	-
F4 PHCs (C34-C50)	10 ug/g dry	220	-	-	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.02	-	-	-
Acenaphthylene	0.02 ug/g dry	<0.02	-	-	-
Anthracene	0.02 ug/g dry	0.18	-	-	-
Benzo[a]anthracene	0.02 ug/g dry	0.10	-	-	-
Benzo[a]pyrene	0.02 ug/g dry	0.08	-	-	-
Benzo[b]fluoranthene	0.02 ug/g dry	0.10	-	-	-
Benzo[g,h,i]perylene	0.02 ug/g dry	0.04	-	-	-
Benzo[k]fluoranthene	0.02 ug/g dry	0.04	-	-	-
Biphenyl	0.02 ug/g dry	<0.02	-	-	-
Chrysene	0.02 ug/g dry	0.10	-	-	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	-	-	-
Fluoranthene	0.02 ug/g dry	0.19	-	-	-
Fluorene	0.02 ug/g dry	0.02	-	-	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.03	-	-	-
1-Methylnaphthalene	0.02 ug/g dry	0.04	-	-	-
2-Methylnaphthalene	0.02 ug/g dry	0.03	-	-	-
Naphthalene	0.02 ug/g dry	0.04	-	-	-
Phenanthrene	0.02 ug/g dry	0.18	-	-	-
Pyrene	0.02 ug/g dry	0.17	-	-	-
2-Fluorobiphenyl	Surrogate	83.8%	-	-	-
Terphenyl-d14	Surrogate	96.3%	-	-	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	-	-	-
Decachlorobiphenyl	Surrogate	95.2%	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Iron	ND	200	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.0973*		*ug/g*		*97.3*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*0.718*	*0.01*	*ug/g*		*53.8*	*32-156*			
Surrogate: Terphenyl-d14	*0.966*	*0.01*	*ug/g*		*72.4*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g						
Bromodichloromethane	ND	0.002	ug/g						
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.010	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: 4-Bromofluorobenzene	*0.179*		*ug/g*		*132*	*83-134*			
Surrogate: Dibromofluoromethane	*0.141*		*ug/g*		*104*	*78-124*			
Surrogate: Toluene-d8	*0.156*		*ug/g*		*114*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g dry	ND				32	
F2 PHCs (C10-C16)	11	10	ug/g dry	ND				50	QR-01
F3 PHCs (C16-C34)	15	10	ug/g dry	16			7.8	50	
F4 PHCs (C34-C50)	ND	10	ug/g dry	ND				50	
Metals									
Antimony	ND	1	ug/g dry	1.7			200.0	26	QR-01
Arsenic	ND	1	ug/g dry	ND				35	
Barium	138	10	ug/g dry	138			0.1	34	
Beryllium	ND	0.5	ug/g dry	ND				25	
Boron, available	ND	0.5	ug/g dry	ND				35	
Cadmium	ND	0.5	ug/g dry	ND				33	
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	28.8	5	ug/g dry	28.4			1.5	32	
Cobalt	6.4	5	ug/g dry	6.5			1.8	32	
Copper	18.1	5	ug/g dry	18.7			3.3	32	
Iron	15100	200	ug/g dry	15000			0.7	32	
Lead	38.8	1	ug/g dry	38.8			0.1	44	
Mercury	ND	0.1	ug/g dry	ND				35	
Molybdenum	ND	1	ug/g dry	1.0			200.0	29	QR-01
Nickel	15.8	5	ug/g dry	16.1			1.5	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	34.9	10	ug/g dry	34.7			0.4	27	
Zinc	45.3	20	ug/g dry	46.0			1.4	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.112*		*ug/g dry*	*ND*	*92.0*	*40-147*			
Physical Characteristics									
% Solids	87.7	0.1	% by Wt.	88.9			1.4	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g dry	ND				50	
Acenaphthylene	ND	0.02	ug/g dry	ND				50	
Anthracene	0.0269	0.02	ug/g dry	ND				50	QR-01
Benzo[a]anthracene	0.0664	0.02	ug/g dry	ND				50	QR-01
Benzo[a]pyrene	0.0522	0.02	ug/g dry	ND				50	QR-01
Benzo[b]fluoranthene	0.0729	0.02	ug/g dry	ND				50	QR-01
Benzo[g,h,i]perylene	0.0297	0.02	ug/g dry	ND				50	QR-01
Benzo[k]fluoranthene	0.0365	0.02	ug/g dry	ND				50	QR-01
Biphenyl	ND	0.02	ug/g dry	ND				50	
Chrysene	0.0721	0.02	ug/g dry	ND				50	QR-01
Dibenzo[a,h]anthracene	ND	0.02	ug/g dry	ND				50	
Fluoranthene	0.117	0.02	ug/g dry	0.0238			132.0	50	QR-01
Fluorene	ND	0.02	ug/g dry	ND				50	
Indeno[1,2,3-cd]pyrene	0.0243	0.02	ug/g dry	ND				50	QR-01

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
2-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
Naphthalene	ND	0.02	ug/g dry	ND				50	
Phenanthrene	0.0879	0.02	ug/g dry	ND				50	QR-01
Pyrene	0.104	0.02	ug/g dry	0.0222			130.0	50	QR-01
Surrogate: 2-Fluorobiphenyl	*1.00*	*0.01*	*ug/g dry*	*ND*	*59.0*	*32-156*			
Surrogate: Terphenyl-d14	*1.26*	*0.01*	*ug/g dry*	*ND*	*74.3*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g dry	ND				50	
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	ND	0.002	ug/g dry	ND				34	
Methylene Chloride	ND	0.010	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	ND	0.002	ug/g dry	ND				35	
o-Xylene	ND	0.002	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*0.202*		*ug/g dry*	*ND*	*132*	*83-134*			
Surrogate: Dibromofluoromethane	*0.172*		*ug/g dry*	*ND*	*112*	*78-124*			

PARACEL LABORATORIES LTD.

Order #: 0903001

Certificate of Analysis

Report Date: 16-Jan-2009

Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Toluene-d8	*0.163*		*ug/g dry*	*ND*	*107*	*76-118*			

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	101	10	ug/g	ND	101	80-120			
F2 PHCs (C10-C16)	82	10	ug/g	ND	102	61-129			
F3 PHCs (C16-C34)	201	10	ug/g	ND	101	61-129			
F4 PHCs (C34-C50)	120	10	ug/g	ND	100	61-129			
Metals									
Antimony	43.2		ug/L	0.09	86.3	78-126			
Arsenic	45.7		ug/L	ND	91.4	80-120			
Barium	62.4		ug/L	10.7	103	83-116			
Beryllium	45.0		ug/L	0.06	89.9	72-123			
Boron, available	4.18	0.5	ug/g	ND	83.6	70-122			
Cadmium	46.9		ug/L	0.06	93.7	78-118			
Chromium (VI)	5.1	0.4	ug/g	ND	102	89-123			
Chromium	55.1		ug/L	3.5	103	80-124			
Cobalt	49.6		ug/L	1.1	96.9	78-125			
Copper	51.2		ug/L	2.0	98.4	75-123			
Iron	4440		ug/L	3490	94.9	66-119			
Lead	52.2		ug/L	1.9	101	80-120			
Mercury	1.57	0.1	ug/g	ND	105	72-128			
Molybdenum	47.9		ug/L	0.3	95.2	82-119			
Nickel	51.3		ug/L	2.3	97.9	78-119			
Selenium	45.3		ug/L	0.007	90.5	81-125			
Silver	46.3		ug/L	0.01	92.6	70-128			
Thallium	46.9		ug/L	0.01	93.7	82-127			
Vanadium	61.8		ug/L	9.3	105	82-123			
Zinc	46.3		ug/L	4.2	84.2	78-130			
PCBs									
PCBs, total	0.358	0.05	ug/g	ND	89.5	58-147			
Surrogate: Decachlorobiphenyl	*0.0954*		*ug/g*		*95.4*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.129	0.02	ug/g	ND	77.3	31-121			
Acenaphthylene	0.132	0.02	ug/g	ND	79.4	26-124			
Anthracene	0.185	0.02	ug/g	ND	111	29-128			
Benzo[a]anthracene	0.190	0.02	ug/g	ND	114	29-129			
Benzo[a]pyrene	0.140	0.02	ug/g	ND	84.1	29-111			
Benzo[b]fluoranthene	0.152	0.02	ug/g	ND	91.3	26-111			
Benzo[g,h,i]perylene	0.136	0.02	ug/g	ND	81.7	23-128			
Benzo[k]fluoranthene	0.194	0.02	ug/g	ND	116	23-135			
Biphenyl	0.123	0.02	ug/g	ND	73.5	31-107			
Chrysene	0.197	0.02	ug/g	ND	118	28-136			
Dibenzo[a,h]anthracene	0.102	0.02	ug/g	ND	61.4	20-131			
Fluoranthene	0.167	0.02	ug/g	ND	100	24-131			
Fluorene	0.164	0.02	ug/g	ND	98.5	28-123			
Indeno[1,2,3-cd]pyrene	0.113	0.02	ug/g	ND	67.8	20-128			
1-Methylnaphthalene	0.0907	0.02	ug/g	ND	54.4	24-127			
2-Methylnaphthalene	0.0902	0.02	ug/g	ND	54.1	21-127			

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Naphthalene	0.0700	0.02	ug/g	ND	42.0	29-118			
Phenanthrene	0.176	0.02	ug/g	ND	106	34-108			
Pyrene	0.176	0.02	ug/g	ND	105	29-131			
Surrogate: 2-Fluorobiphenyl	*1.00*	0.01	*ug/g*		*75.3*	*32-156*			
Surrogate: Terphenyl-d14	*1.24*	0.01	*ug/g*		*92.7*	*39-146*			
Volatiles									
Benzene	0.0688	0.002	ug/g	ND	101	55-141			
Bromodichloromethane	0.0784	0.002	ug/g	ND	115	52-139			
Bromoform	0.0831	0.002	ug/g	ND	122	52-170			
Bromomethane	0.0914	0.003	ug/g	ND	134	32-138			
Carbon Tetrachloride	0.0692	0.002	ug/g	ND	102	49-149			
Chlorobenzene	0.0722	0.002	ug/g	ND	106	64-137			
Chloroethane	0.0586	0.005	ug/g	ND	86.2	39-152			
Chloroform	0.0786	0.003	ug/g	ND	116	58-138			
Chloromethane	0.0527	0.020	ug/g	ND	77.5	24-163			
Dibromochloromethane	0.0791	0.002	ug/g	ND	116	61-153			
1,2-Dibromoethane	0.0787	0.002	ug/g	ND	116	61-145			
1,2-Dichlorobenzene	0.0747	0.002	ug/g	ND	110	60-150			
1,3-Dichlorobenzene	0.0717	0.002	ug/g	ND	105	62-149			
1,4-Dichlorobenzene	0.0722	0.002	ug/g	ND	106	63-132			
1,1-Dichloroethane	0.0731	0.002	ug/g	ND	108	51-156			
1,2-Dichloroethane	0.0809	0.002	ug/g	ND	119	50-140			
1,1-Dichloroethylene	0.0632	0.002	ug/g	ND	93.0	43-153			
cis-1,2-Dichloroethylene	0.0744	0.002	ug/g	ND	109	58-145			
trans-1,2-Dichloroethylene	0.0628	0.003	ug/g	ND	92.3	51-145			
1,2-Dichloropropane	0.0801	0.002	ug/g	ND	118	56-136			
cis-1,3-Dichloropropylene	0.0847	0.002	ug/g	ND	125	54-141			
trans-1,3-Dichloropropylene	0.0845	0.002	ug/g	ND	124	61-140			
Ethylbenzene	0.0709	0.002	ug/g	ND	104	61-139			
Methylene Chloride	0.0853	0.010	ug/g	ND	125	58-149			
Styrene	0.0782	0.002	ug/g	ND	115	63-143			
1,1,1,2-Tetrachloroethane	0.0801	0.003	ug/g	ND	118	61-148			
1,1,2,2-Tetrachloroethane	0.0808	0.003	ug/g	ND	119	50-157			
Tetrachloroethylene	0.0627	0.002	ug/g	ND	92.2	51-145			
Toluene	0.0813	0.002	ug/g	ND	120	54-136			
1,1,1-Trichloroethane	0.0722	0.002	ug/g	ND	106	55-140			
1,1,2-Trichloroethane	0.0863	0.002	ug/g	ND	127	63-144			
Trichloroethylene	0.0736	0.003	ug/g	ND	108	52-135			
Trichlorofluoromethane	0.0688	0.005	ug/g	ND	101	37-155			
1,3,5-Trimethylbenzene	0.0677	0.003	ug/g	ND	99.6	61-151			
Vinyl chloride	0.0501	0.002	ug/g	ND	73.7	31-159			
m,p-Xylenes	0.141	0.002	ug/g	ND	104	61-139			
o-Xylene	0.0738	0.002	ug/g	ND	108	60-142			
Surrogate: 4-Bromofluorobenzene	*0.131*		*ug/g*		*96.4*	*83-134*			
Surrogate: Dibromofluoromethane	*0.138*		*ug/g*		*102*	*78-124*			
Surrogate: Toluene-d8	*0.136*		*ug/g*		*100*	*76-118*			

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:9-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- GEN09 : Elevated detection limits due to the nature of the sample matrix.
2- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.
3- QR-04 : Duplicate results exceeds RPD limits due to non-homogeneous matrix.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Chain of Custody Record

№ 54710

Pg. 1 of 2

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0903001	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	PHC(F1 to F4)	Metals	PCBs	PAH									Hazardous? (Y/N)
1	MW09-12 SS1	S		1	Jan 8/09	X	X	X	X	X									
2	MW09-12 SS6	S																	
3	MW09-14 SS1																		
4	MW09-14 SS100																		
5	MW09-14 SS3																		
6	MW09-15 SS1																		
7	MW09-15 SS100																		
8	MW09-15 SS4																		
9	MW09-13 SS1																		
10	MW09-13 SS5																		

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 9/09 Time: 5:40	Date: Time:	Date: Jan 9/09 Time: 5:40	Date: Jan. 12/09 Time: 7:54

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Chain of Custody Record

№ 54711

Pg. 2 of 2

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: ☐ 1-day ☐ 2-day ☒ Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S-Soil/Sed GW-Ground Water SW-Surface Water SS-Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

	Sample Information					Analysis Required												
	Paracel Order # 0903001 / Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	PHC (F1 to F4)	Metals	PCBs	PAH								Hazardous? (Y/N)
1	MW09-10 SS1	S		1	Jan 9/09	X	X	X	X	X								
2	MW09-10 SS100	↓		↓	↓	↓	↓	↓	↓	↓								
3	MW09-10 SS2	↓		↓	↓	↓	↓	↓	↓	↓								
4	MW09-4 SS1	↓		↓	↓	↓	↓	↓	↓	↓								
5	MW09-4 SS10	↓		↓	↓	↓	↓	↓	↓	↓								
6	MW09-8 SS1	↓		↓	↓	↓	↓	↓	↓	↓								
7	MW09-8 SS6	↓		↓	↓	↓	↓	↓	↓	↓								
8																		
9																		
10																		

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 9/09 Time: 5:40	Date: Time:	Date: Jan 9/09 Time: 5:41	Date: Jan 12/09 Time: 7:54

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 54710

Report Date: 16-Jan-2009
Order Date: 12-Jan-2009
Order #: 0903025

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0903025-01	Comp SS1's

Approved By: Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Flashpoint	Penski Martin Closed Cup	14-Jan-09	14-Jan-09
REG 558 - Cyanide	MOE E3015- Auto Colour	14-Jan-09	15-Jan-09
REG 558 - Fluoride	EPA 340.2 - ISE	15-Jan-09	15-Jan-09
REG 558 - Mercury	EPA 7471A - Cold Vapour AA	14-Jan-09	15-Jan-09
REG 558 - Metals, ICP	EPA 6020: ICP-MS, digestion	15-Jan-09	15-Jan-09
REG 558 - NO3/NO2	EPA 300.1 - IC	15-Jan-09	15-Jan-09
REG 558 - PAHs	EPA 625 - GC-MS	15-Jan-09	16-Jan-09
REG 558 - PCBs	EPA 608 - GC-ECD	15-Jan-09	15-Jan-09
REG 558 - VOCs	EPA 624 - P&T GC-MS	13-Jan-09	16-Jan-09
Solids, %	Gravimetric, calculation	13-Jan-09	13-Jan-09
TCLP Metals/SVOCs - Extraction	EPA 1311 TCLP Extraction Procedure	13-Jan-09	15-Jan-09
TPH (diesel)	based on E3398/EPA3546 - GC-FID, extraction	14-Jan-09	15-Jan-09
TPH (heavy oil)	MOE E3398/EPA3546 - Gravimetric	16-Jan-09	16-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	Comp SS1's	-	-	-
	Sample Date:	08-Jan-09	-	-	-
	Sample ID:	0903025-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
Flashpoint	°C	>70	-	-	-
% Solids	0.1 % by Wt.	90.8	-	-	-
EPA 1311 - TCLP Leachate Inorganics					
Cyanide, free	0.002 mg/L	<0.002	-	-	-
Fluoride	0.05 mg/L	0.16	-	-	-
Arsenic	0.05 mg/L	<0.05	-	-	-
Barium	0.05 mg/L	1.27	-	-	-
Nitrate as N	1 mg/L	<1	-	-	-
Nitrite as N	1 mg/L	2	-	-	-
Boron	0.05 mg/L	<0.05	-	-	-
Cadmium	0.01 mg/L	<0.01	-	-	-
Chromium	0.05 mg/L	<0.05	-	-	-
Lead	0.05 mg/L	<0.05	-	-	-
Mercury	0.005 mg/L	<0.005	-	-	-
Selenium	0.05 mg/L	<0.05	-	-	-
Silver	0.05 mg/L	<0.05	-	-	-
Uranium	0.05 mg/L	<0.05	-	-	-
Initial pH	1.00 pH Units dry	9.35	-	-	-
Final pH	1.00 pH Units dry	6.11	-	-	-
EPA 1311 - TCLP Leachate Organics					
Benzene	0.0005 mg/L	<0.0005	-	-	-
Carbon Tetrachloride	0.0005 mg/L	<0.0005	-	-	-
Chlorobenzene	0.0004 mg/L	<0.0004	-	-	-
Chloroform	0.0006 mg/L	<0.0006	-	-	-
1,2-Dichlorobenzene	0.0004 mg/L	<0.0004	-	-	-
1,4-Dichlorobenzene	0.0004 mg/L	<0.0004	-	-	-
1,2-Dichloroethane	0.0005 mg/L	<0.0005	-	-	-
1,1-Dichloroethylene	0.0006 mg/L	<0.0006	-	-	-
Methyl Ethyl Ketone (2-Butanone)	0.03 mg/L	<0.03	-	-	-
Methylene Chloride	0.004 mg/L	<0.004	-	-	-
Tetrachloroethylene	0.0005 mg/L	<0.0005	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO:

Project Description: OTEN00019406P

	Client ID:	Comp SS1's	-	-	-
	Sample Date:	08-Jan-09	-	-	-
	Sample ID:	0903025-01	-	-	-
	MDL/Units	Soil	-	-	-
Trichloroethylene	0.0004 mg/L	<0.0004	-	-	-
Vinyl chloride	0.0005 mg/L	<0.0005	-	-	-
4-Bromofluorobenzene	Surrogate	107%	-	-	-
Dibromofluoromethane	Surrogate	102%	-	-	-
Toluene-d8	Surrogate	87.0%	-	-	-
Benzo[a]pyrene	0.0001 mg/L	<0.0001	-	-	-
Terphenyl-d14	Surrogate	72.5%	-	-	-
PCBs, total	0.003 mg/L	<0.003	-	-	-
Decachlorobiphenyl	Surrogate	92.8%	-	-	-
Hydrocarbons					
TPH (diesel)	10 ug/g dry	86	-	-	-
TPH (heavy oil)	50 ug/g dry	<50	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	ND	0.002	mg/L						
Fluoride	ND	0.05	mg/L						
Arsenic	ND	0.05	mg/L						
Barium	ND	0.05	mg/L						
Nitrate as N	ND	1	mg/L						
Nitrite as N	ND	1	mg/L						
Boron	ND	0.05	mg/L						
Cadmium	ND	0.01	mg/L						
Chromium	ND	0.05	mg/L						
Lead	ND	0.05	mg/L						
Mercury	ND	0.005	mg/L						
Selenium	ND	0.05	mg/L						
Silver	ND	0.05	mg/L						
Uranium	ND	0.05	mg/L						
EPA 1311 - TCLP Leachate Organics									
Benzene	ND	0.0005	mg/L						
Carbon Tetrachloride	ND	0.0005	mg/L						
Chlorobenzene	ND	0.0004	mg/L						
Chloroform	ND	0.0006	mg/L						
1,2-Dichlorobenzene	ND	0.0004	mg/L						
1,4-Dichlorobenzene	ND	0.0004	mg/L						
1,2-Dichloroethane	ND	0.0005	mg/L						
1,1-Dichloroethylene	ND	0.0006	mg/L						
Methyl Ethyl Ketone (2-Butanone)	ND	0.03	mg/L						
Methylene Chloride	ND	0.004	mg/L						
Tetrachloroethylene	ND	0.0005	mg/L						
Trichloroethylene	ND	0.0004	mg/L						
Vinyl chloride	ND	0.0005	mg/L						
Surrogate: 4-Bromofluorobenzene	*0.0862*		*mg/L*		*108*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0775*		*mg/L*		*96.8*	*78-124*			
Surrogate: Toluene-d8	*0.0688*		*mg/L*		*86.1*	*76-118*			
Benzo[a]pyrene	ND	0.0001	mg/L						
Surrogate: Terphenyl-d14	*0.141*		*mg/L*		*70.3*	*37.1-155.6*			
PCBs, total	ND	0.003	mg/L						
Surrogate: Decachlorobiphenyl	*0.00800*		*mg/L*		*80.0*	*62-138*			
Hydrocarbons									
TPH (diesel)	ND	10	ug/g						
TPH (heavy oil)	ND	50	ug/g						

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	ND	0.002	mg/L	ND				20	
Fluoride	0.15	0.05	mg/L	0.15			0.9	20	
Arsenic	ND	0.05	mg/L	ND				28.6	
Barium	1.10	0.05	mg/L	1.10			0.0	33.9	
Nitrate as N	ND	1	mg/L	ND				20	
Nitrite as N	2	1	mg/L	2			4.2	20	
Boron	3.35	0.05	mg/L	3.13			6.9	32.6	
Cadmium	0.419	0.01	mg/L	0.434			3.6	33.1	
Chromium	ND	0.05	mg/L	ND				31.7	
Lead	1.08	0.05	mg/L	1.09			0.1	31.9	
Mercury	ND	0.005	mg/L	ND				20	
Selenium	ND	0.05	mg/L	ND				27.9	
Silver	ND	0.05	mg/L	ND				28	
Uranium	ND	0.05	mg/L	ND				26.6	
EPA 1311 - TCLP Leachate Organics									
Benzene	ND	0.0005	mg/L	ND				25	
Carbon Tetrachloride	ND	0.0005	mg/L	ND				25	
Chlorobenzene	ND	0.0004	mg/L	ND				25	
Chloroform	ND	0.0006	mg/L	ND				25	
1,2-Dichlorobenzene	ND	0.0004	mg/L	ND				25	
1,4-Dichlorobenzene	ND	0.0004	mg/L	ND				25	
1,2-Dichloroethane	ND	0.0005	mg/L	ND				25	
1,1-Dichloroethylene	ND	0.0006	mg/L	ND				25	
Methyl Ethyl Ketone (2-Butanone)	ND	0.03	mg/L	ND				25	
Methylene Chloride	ND	0.004	mg/L	ND				25	
Tetrachloroethylene	ND	0.0005	mg/L	ND				25	
Trichloroethylene	ND	0.0004	mg/L	ND				25	
Vinyl chloride	ND	0.0005	mg/L	ND				25	
Surrogate: 4-Bromofluorobenzene	*0.0896*		*mg/L*	*ND*	*112*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0814*		*mg/L*	*ND*	*102*	*78-124*			
Surrogate: Toluene-d8	*0.0704*		*mg/L*	*ND*	*88.0*	*76-118*			
Benzo[a]pyrene	ND	0.0001	mg/L	ND				50	
Surrogate: Terphenyl-d14	*0.141*		*mg/L*	*ND*	*70.4*	*37.1-155.6*			
PCBs, total	ND	0.003	mg/L	ND				30	
Surrogate: Decachlorobiphenyl	*0.00882*		*mg/L*	*ND*	*88.2*	*62-138*			
Hydrocarbons									
TPH (diesel)	26400	100	ug/g dry	23000			13.9	50	
TPH (heavy oil)	31300	50	ug/g dry	24900			22.8	34	
Physical Characteristics									
% Solids	90.9	0.1	% by Wt.	90.9			0.0	25	

PARACEL LABORATORIES LTD.

Order #: 0903025

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	0.024	0.002	mg/L	ND	71.4	60-136			
Fluoride	0.58	0.05	mg/L	0.15	85.7	0-200			
Arsenic	51.7		ug/L	0.597	102	83.1-118.6			
Barium	164		ug/L	110	107	83.4-116.1			
Nitrate as N	10	1	mg/L	ND	100	81-112			
Nitrite as N	9	1	mg/L	ND	92.5	76-107			
Boron	360		ug/L	313	95.0	70.9-127.7			
Cadmium	92.6		ug/L	43.4	98.4	77.9-118.7			
Chromium	49.0		ug/L	1.30	95.5	79.7-123.8			
Lead	163		ug/L	109	108	77.2-125.6			
Mercury	0.0310	0.005	mg/L	ND	103	78-134			
Selenium	50.7		ug/L	1.33	98.8	81.2-124.6			
Silver	47.4		ug/L	0.087	94.7	69.9-128.1			
Uranium	47.8		ug/L	ND	95.7	69.6-130.7			
EPA 1311 - TCLP Leachate Organics									
Benzene	0.034	0.0005	mg/L	ND	86.2	55-141			
Carbon Tetrachloride	0.040	0.0005	mg/L	ND	101	49-149			
Chlorobenzene	0.037	0.0004	mg/L	ND	92.2	64-137			
Chloroform	0.036	0.0006	mg/L	ND	90.3	58-138			
1,2-Dichlorobenzene	0.036	0.0004	mg/L	ND	90.4	60-150			
1,4-Dichlorobenzene	0.034	0.0004	mg/L	ND	85.6	63-132			
1,2-Dichloroethane	0.033	0.0005	mg/L	ND	83.5	50-140			
1,1-Dichloroethylene	0.034	0.0006	mg/L	ND	85.4	43-153			
Methyl Ethyl Ketone (2-Butanone)	0.091	0.03	mg/L	ND	91.0	26-153			
Methylene Chloride	0.042	0.004	mg/L	ND	105	58-149			
Tetrachloroethylene	0.042	0.0005	mg/L	ND	105	51-145			
Trichloroethylene	0.036	0.0004	mg/L	ND	91.2	52-135			
Vinyl chloride	0.032	0.0005	mg/L	ND	79.7	31-159			
Surrogate: 4-Bromofluorobenzene	*0.0858*		*mg/L*		*107*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0815*		*mg/L*		*102*	*78-124*			
Surrogate: Toluene-d8	*0.0768*		*mg/L*		*96.1*	*76-118*			
Benzo[a]pyrene	0.0490	0.0001	mg/L	ND	97.9	39-123			
Surrogate: Terphenyl-d14	*0.143*		*mg/L*		*71.3*	*37.1-155.6*			
PCBs, total	0.033	0.003	mg/L	ND	81.5	86-145			
Surrogate: Decachlorobiphenyl	*0.00772*		*mg/L*		*77.2*	*62-138*			
Hydrocarbons									
TPH (diesel)	198	10	ug/g	ND	99.0	49.3-134.8			
TPH (heavy oil)	910	50	ug/g	ND	91.0	69-125			

Certificate of Analysis

Report Date: 16-Jan-2009
Order Date:12-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**

Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

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www.paracellabs.com

Chain of Custody Record

№ 54710

Pg. 1 of 2

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN0001940 6P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0903001	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	PHC(F1+F4)	Metals	PCBs	PAH									Hazardous? (Y/N)
1	MW09-12 SS1	S		1	Jan 8/09	X	X	X	X	X									
2	MW09-12 SS6	S																	
3	MW09-14 SS1																		
4	MW09-14 SS100																		
5	MW09-14 SS3																		
6	MW09-15 SS1																		
7	MW09-15 SS100																		
8	MW09-15 SS4																		
9	MW09-13 SS1																		
10	MW09-13 SS5																		

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 9/09 Time: 5:40	Date: Time:	Date: Jan 9/09 Time: 5:40	Date: Jan. 12/09 Time: 7:54

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Chain of Custody Record
№ 54711
Pg. 2 of 2

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

	Sample Information					Analysis Required												
Paracel Order # 0903001	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	PHC (F1 to F4)	Metals	PCBs	PAH								Hazardous? (Y/N)
1	MW09-10 SS1	S		1	Jan 9/09	X	X	X	X	X								
2	MW09-10 SS100	↓		↓	↓	↓	↓	↓	↓	↓								
3	MW09-10 SS2																	
4	MW09-4 SS1																	
5	MW09-4 SS10																	
6	MW09-8 SS1																	
7	MW09-8 SS6																	
8																		
9																		
10																		

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 9/09 Time: 5:40	Date: Time:	Date: Jan 9/09 Time: 5:41	Date: Jan.12/09 Time: 7:54

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 53240

Report Date: 19-Jan-2009
Order Date: 13-Jan-2009
Revised Report **Order #: 0903045**

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0903045-01	MW09-3 SS1
0903045-02	MW09-3 SS8
0903045-03	MW09-2 SS1
0903045-04	MW09-2 SS3
0903045-05	MW09-1 SS1
0903045-06	MW09-1 SS2

Approved By:

Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	15-Jan-09	15-Jan-09
CCME PHC F1	CWS Tier 1 - P&T GC-FID	13-Jan-09	16-Jan-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	14-Jan-09	15-Jan-09
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	15-Jan-09	15-Jan-09
Mercury	EPA 7471A - CVAA, digestion	15-Jan-09	15-Jan-09
Metals	EPA 6020 - Digestion - ICP-MS	15-Jan-09	15-Jan-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	15-Jan-09	16-Jan-09
PCBs, total	SW846 8080 - GC-ECD	15-Jan-09	15-Jan-09
Solids, %	Gravimetric, calculation	14-Jan-09	14-Jan-09
VOCs	EPA 8260 - P&T GC-MS	13-Jan-09	16-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-3 SS1	MW09-3 SS8	MW09-2 SS1	MW09-2 SS3
	Sample Date:	12-Jan-09	12-Jan-09	12-Jan-09	12-Jan-09
	Sample ID:	0903045-01	0903045-02	0903045-03	0903045-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	93.6	87.4	87.8	94.3
Metals					
Antimony	1 ug/g dry	<1	2	<1	<1
Arsenic	1 ug/g dry	<1	2	<1	<1
Barium	10 ug/g dry	27	233	57	35
Beryllium	0.5 ug/g dry	<0.5	0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	1.0	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	0.6	<0.5	<0.5
Chromium	5 ug/g dry	9	28	14	8
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	7	<5	<5
Copper	5 ug/g dry	5	58	10	9
Iron	200 ug/g dry	8720	19100	9270	8200
Lead	1 ug/g dry	5	203	23	14
Mercury	0.1 ug/g dry	<0.1	0.3	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	<1	<1	<1
Nickel	5 ug/g dry	6	22	8	5
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	23	25	25	18
Zinc	20 ug/g dry	<20	206	36	<20
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-3 SS1	MW09-3 SS8	MW09-2 SS1	MW09-2 SS3
	Sample Date:	12-Jan-09	12-Jan-09	12-Jan-09	12-Jan-09
	Sample ID:	0903045-01	0903045-02	0903045-03	0903045-04
	MDL/Units	Soil	Soil	Soil	Soil
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	122%	108%	121%	125%
Dibromofluoromethane	Surrogate	105%	104%	104%	105%

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-3 SS1	MW09-3 SS8	MW09-2 SS1	MW09-2 SS3
	Sample Date:	12-Jan-09	12-Jan-09	12-Jan-09	12-Jan-09
	Sample ID:	0903045-01	0903045-02	0903045-03	0903045-04
	MDL/Units	Soil	Soil	Soil	Soil
Toluene-d8	Surrogate	111%	106%	109%	112%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	825	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	344	1080	<10	81
F4 PHCs (C34-C50)	10 ug/g dry	739	<10	<10	70
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.12	<0.02	<0.02
Acenaphthylene	0.02 ug/g dry	<0.02	0.22	<0.02	0.03
Anthracene	0.02 ug/g dry	<0.02	0.60	0.03	0.06
Benzo[a]anthracene	0.02 ug/g dry	<0.02	1.03	0.07	0.13
Benzo[a]pyrene	0.02 ug/g dry	<0.02	0.82	0.06	0.14
Benzo[b]fluoranthene	0.02 ug/g dry	<0.02	1.08	0.08	0.17
Benzo[g,h,i]perylene	0.02 ug/g dry	<0.02	0.43	0.03	0.08
Benzo[k]fluoranthene	0.02 ug/g dry	<0.02	0.50	0.03	0.08
Biphenyl	0.02 ug/g dry	<0.02	0.03	<0.02	<0.02
Chrysene	0.02 ug/g dry	<0.02	1.07	0.08	0.13
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	0.09	<0.02	0.02
Fluoranthene	0.02 ug/g dry	<0.02	1.75	0.12	0.20
Fluorene	0.02 ug/g dry	<0.02	0.28	<0.02	0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.39	0.03	0.07
1-Methylnaphthalene	0.02 ug/g dry	<0.02	0.06	<0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	0.07	<0.02	<0.02
Naphthalene	0.02 ug/g dry	<0.02	0.08	<0.02	0.02
Phenanthrene	0.02 ug/g dry	<0.02	1.74	0.06	0.16
Pyrene	0.02 ug/g dry	<0.02	1.58	0.11	0.19
2-Fluorobiphenyl	Surrogate	77.9%	76.5%	74.7%	79.5%
Terphenyl-d14	Surrogate	88.6%	90.4%	85.1%	87.2%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	99.0%	80.1%	81.8%	98.4%

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1 SS1	MW09-1 SS2	-	-
	Sample Date:	12-Jan-09	12-Jan-09	-	-
	Sample ID:	0903045-05	0903045-06	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	86.0	89.3	-	-
Metals					
Antimony	1 ug/g dry	<1	<1	-	-
Arsenic	1 ug/g dry	<1	4	-	-
Barium	10 ug/g dry	78	131	-	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	-	-
Boron, available	0.5 ug/g dry	<0.5	<0.5	-	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	-	-
Chromium	5 ug/g dry	15	20	-	-
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	-	-
Cobalt	5 ug/g dry	<5	6	-	-
Copper	5 ug/g dry	7	27	-	-
Iron	200 ug/g dry	11000	15400	-	-
Lead	1 ug/g dry	13	109	-	-
Mercury	0.1 ug/g dry	<0.1	0.2	-	-
Molybdenum	1 ug/g dry	<1	<1	-	-
Nickel	5 ug/g dry	8	15	-	-
Selenium	1 ug/g dry	<1	<1	-	-
Silver	0.3 ug/g dry	<0.3	<0.3	-	-
Thallium	1 ug/g dry	<1	<1	-	-
Vanadium	10 ug/g dry	26	26	-	-
Zinc	20 ug/g dry	35	95	-	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	-	-
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	-	-
Bromoform	0.002 ug/g dry	<0.002	<0.002	-	-
Bromomethane	0.003 ug/g dry	<0.003	<0.003	-	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	-	-
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
Chloroethane	0.005 ug/g dry	<0.005	<0.005	-	-
Chloroform	0.003 ug/g dry	<0.003	<0.003	-	-

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1 SS1	MW09-1 SS2	-	-
	Sample Date:	12-Jan-09	12-Jan-09	-	-
	Sample ID:	0903045-05	0903045-06	-	-
	MDL/Units	Soil	Soil	-	-
Chloromethane	0.020 ug/g dry	<0.020	<0.020	-	-
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	-	-
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	-	-
Styrene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
Toluene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	-	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	-	-
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	-	-
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	-	-
o-Xylene	0.002 ug/g dry	<0.002	<0.002	-	-
4-Bromofluorobenzene	Surrogate	118%	121%	-	-
Dibromofluoromethane	Surrogate	106%	106%	-	-
Toluene-d8	Surrogate	112%	112%	-	-

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1 SS1	MW09-1 SS2	-	-
	Sample Date:	12-Jan-09	12-Jan-09	-	-
	Sample ID:	0903045-05	0903045-06	-	-
	MDL/Units	Soil	Soil	-	-
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	-	-
F2 PHCs (C10-C16)	10 ug/g dry	<10	33	-	-
F3 PHCs (C16-C34)	10 ug/g dry	<10	384	-	-
F4 PHCs (C34-C50)	10 ug/g dry	<10	328	-	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.07	-	-
Acenaphthylene	0.02 ug/g dry	<0.02	0.15	-	-
Anthracene	0.02 ug/g dry	<0.02	0.25	-	-
Benzo[a]anthracene	0.02 ug/g dry	<0.02	0.58	-	-
Benzo[a]pyrene	0.02 ug/g dry	<0.02	0.51	-	-
Benzo[b]fluoranthene	0.02 ug/g dry	0.02	0.78	-	-
Benzo[g,h,i]perylene	0.02 ug/g dry	<0.02	0.32	-	-
Benzo[k]fluoranthene	0.02 ug/g dry	<0.02	0.27	-	-
Biphenyl	0.02 ug/g dry	<0.02	0.08	-	-
Chrysene	0.02 ug/g dry	<0.02	0.69	-	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	0.08	-	-
Fluoranthene	0.02 ug/g dry	0.02	0.91	-	-
Fluorene	0.02 ug/g dry	<0.02	0.09	-	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.26	-	-
1-Methylnaphthalene	0.02 ug/g dry	<0.02	0.70	-	-
2-Methylnaphthalene	0.02 ug/g dry	<0.02	0.82	-	-
Naphthalene	0.02 ug/g dry	<0.02	0.47	-	-
Phenanthrene	0.02 ug/g dry	<0.02	0.88	-	-
Pyrene	0.02 ug/g dry	0.02	0.86	-	-
2-Fluorobiphenyl	Surrogate	77.3%	85.1%	-	-
Terphenyl-d14	Surrogate	82.0%	90.3%	-	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	-	-
Decachlorobiphenyl	Surrogate	72.8%	86.1%	-	-

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Iron	ND	200	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.101*		*ug/g*		*101*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*0.965*	*0.01*	*ug/g*		*72.4*	*32-156*			
Surrogate: Terphenyl-d14	*1.08*	*0.01*	*ug/g*		*80.9*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g						

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	ND	0.002	ug/g						
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.010	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: 4-Bromofluorobenzene	*0.172*		*ug/g*		*127*	*83-134*			
Surrogate: Dibromofluoromethane	*0.155*		*ug/g*		*114*	*78-124*			
Surrogate: Toluene-d8	*0.144*		*ug/g*		*106*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	13	10	ug/g dry	18			28.2	32	
F2 PHCs (C10-C16)	1010	10	ug/g dry	682			38.9	50	
F3 PHCs (C16-C34)	659	10	ug/g dry	489			29.6	50	
F4 PHCs (C34-C50)	ND	10	ug/g dry	ND				50	
Metals									
Antimony	ND	1	ug/g dry	1.7			200.0	26	QR-01
Arsenic	ND	1	ug/g dry	ND				35	
Barium	138	10	ug/g dry	138			0.1	34	
Beryllium	ND	0.5	ug/g dry	ND				25	
Boron, available	ND	0.5	ug/g dry	ND				35	
Cadmium	ND	0.5	ug/g dry	ND				33	
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	28.8	5	ug/g dry	28.4			1.5	32	
Cobalt	6.4	5	ug/g dry	6.5			1.8	32	
Copper	18.1	5	ug/g dry	18.7			3.3	32	
Iron	15100	200	ug/g dry	15000			0.7	32	
Lead	38.8	1	ug/g dry	38.8			0.1	44	
Mercury	ND	0.1	ug/g dry	ND				35	
Molybdenum	ND	1	ug/g dry	1.0			200.0	29	QR-01
Nickel	15.8	5	ug/g dry	16.1			1.5	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	34.9	10	ug/g dry	34.7			0.4	27	
Zinc	45.3	20	ug/g dry	46.0			1.4	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.0966*		*ug/g dry*	*ND*	*84.8*	*40-147*			
Physical Characteristics									
% Solids	88.1	0.1	% by Wt.	89.3			1.4	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g dry	ND				50	
Acenaphthylene	ND	0.02	ug/g dry	ND				50	
Anthracene	0.0423	0.02	ug/g dry	0.0273			43.1	50	
Benzo[a]anthracene	0.101	0.02	ug/g dry	0.0670			40.6	50	
Benzo[a]pyrene	0.0893	0.02	ug/g dry	0.0572			43.9	50	
Benzo[b]fluoranthene	0.122	0.02	ug/g dry	0.0788			43.0	50	
Benzo[g,h,i]perylene	0.0494	0.02	ug/g dry	0.0339			37.2	50	
Benzo[k]fluoranthene	0.0545	0.02	ug/g dry	0.0342			45.8	50	
Biphenyl	ND	0.02	ug/g dry	ND				50	
Chrysene	0.112	0.02	ug/g dry	0.0758			38.8	50	
Dibenzo[a,h]anthracene	ND	0.02	ug/g dry	ND				50	
Fluoranthene	0.193	0.02	ug/g dry	0.123			44.4	50	
Fluorene	ND	0.02	ug/g dry	ND				50	
Indeno[1,2,3-cd]pyrene	0.0441	0.02	ug/g dry	0.0293			40.3	50	
1-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
2-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
Naphthalene	ND	0.02	ug/g dry	ND				50	
Phenanthrene	0.113	0.02	ug/g dry	0.0637			55.7	50	QR-01
Pyrene	0.172	0.02	ug/g dry	0.114			40.9	50	
Surrogate: 2-Fluorobiphenyl	*1.08*	*0.01*	*ug/g dry*	*ND*	*71.0*	*32-156*			

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Terphenyl-d14	*1.16*	*0.01*	*ug/g dry*	*ND*	*76.7*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g dry	ND				50	
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	ND	0.002	ug/g dry	ND				34	
Methylene Chloride	ND	0.010	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	ND	0.002	ug/g dry	ND				35	
o-Xylene	ND	0.002	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*0.171*		*ug/g dry*	*ND*	*101*	*83-134*			
Surrogate: Dibromofluoromethane	*0.170*		*ug/g dry*	*ND*	*101*	*78-124*			
Surrogate: Toluene-d8	*0.199*		*ug/g dry*	*ND*	*118*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0903045

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	100	10	ug/g	ND	100	80-120			
F2 PHCs (C10-C16)	99	10	ug/g	ND	124	61-129			
F3 PHCs (C16-C34)	250	10	ug/g	ND	125	61-129			
F4 PHCs (C34-C50)	138	10	ug/g	ND	115	61-129			
Metals									
Antimony	42.8		ug/L	0.7	84.2	78-126			
Arsenic	44.3		ug/L	0.2	88.2	80-120			
Barium	109		ug/L	55.3	107	83-116			
Beryllium	46.5		ug/L	0.14	92.6	72-123			
Boron, available	4.63	0.5	ug/g	ND	92.6	70-122			
Cadmium	45.6		ug/L	0.18	90.9	78-118			
Chromium (VI)	5.1	0.4	ug/g	ND	102	89-123			
Chromium	61.2		ug/L	11.4	99.7	80-124			
Cobalt	50.0		ug/L	2.6	94.8	78-125			
Copper	55.5		ug/L	7.5	96.0	75-123			
Iron	6810		ug/L	6000	80.5	66-119			
Lead	67.1		ug/L	15.5	103	80-120			
Mercury	1.70	0.1	ug/g	ND	113	72-128			
Molybdenum	46.7		ug/L	0.4	92.6	82-119			
Nickel	54.1		ug/L	6.4	95.3	78-119			
Selenium	43.5		ug/L	0.2	86.6	81-125			
Silver	44.8		ug/L	0.07	89.4	70-128			
Thallium	48.4		ug/L	0.05	96.6	82-127			
Vanadium	65.2		ug/L	13.9	103	82-123			
Zinc	58.9		ug/L	18.4	81.0	78-130			
PCBs									
PCBs, total	0.330	0.05	ug/g	ND	82.5	58-147			
Surrogate: Decachlorobiphenyl	*0.102*		*ug/g*		*102*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.137	0.02	ug/g	ND	82.3	31-121			
Acenaphthylene	0.142	0.02	ug/g	ND	85.0	26-124			
Anthracene	0.178	0.02	ug/g	ND	107	29-128			
Benzo[a]anthracene	0.176	0.02	ug/g	ND	106	29-129			
Benzo[a]pyrene	0.157	0.02	ug/g	ND	93.9	29-111			
Benzo[b]fluoranthene	0.142	0.02	ug/g	ND	85.5	26-111			
Benzo[g,h,i]perylene	0.141	0.02	ug/g	ND	84.4	23-128			
Benzo[k]fluoranthene	0.171	0.02	ug/g	ND	102	23-135			
Biphenyl	0.138	0.02	ug/g	ND	83.0	31-107			
Chrysene	0.174	0.02	ug/g	ND	104	28-136			
Dibenzo[a,h]anthracene	0.121	0.02	ug/g	ND	72.6	20-131			
Fluoranthene	0.155	0.02	ug/g	ND	93.0	24-131			
Fluorene	0.159	0.02	ug/g	ND	95.1	28-123			
Indeno[1,2,3-cd]pyrene	0.125	0.02	ug/g	ND	75.0	20-128			
1-Methylnaphthalene	0.115	0.02	ug/g	ND	68.7	24-127			
2-Methylnaphthalene	0.120	0.02	ug/g	ND	71.7	21-127			
Naphthalene	0.107	0.02	ug/g	ND	64.4	29-118			
Phenanthrene	0.166	0.02	ug/g	ND	99.5	34-108			
Pyrene	0.164	0.02	ug/g	ND	98.2	29-131			
Surrogate: 2-Fluorobiphenyl	*1.08*	0.01	*ug/g*		*80.7*	*32-156*			
Surrogate: Terphenyl-d14	*1.23*	0.01	*ug/g*		*92.2*	*39-146*			
Volatiles									
Benzene	0.0715	0.002	ug/g	ND	105	55-141			

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	0.0823	0.002	ug/g	ND	121	52-139			
Bromoform	0.0608	0.002	ug/g	ND	89.4	52-170			
Bromomethane	0.0858	0.003	ug/g	ND	126	32-138			
Carbon Tetrachloride	0.0628	0.002	ug/g	ND	92.3	49-149			
Chlorobenzene	0.0541	0.002	ug/g	ND	79.5	64-137			
Chloroethane	0.0504	0.005	ug/g	ND	74.0	39-152			
Chloroform	0.0774	0.003	ug/g	ND	114	58-138			
Chloromethane	0.0576	0.020	ug/g	ND	84.8	24-163			
Dibromochloromethane	0.0569	0.002	ug/g	ND	83.7	61-153			
1,2-Dibromoethane	0.0615	0.002	ug/g	ND	90.5	61-145			
1,2-Dichlorobenzene	0.0479	0.002	ug/g	ND	70.4	60-150			
1,3-Dichlorobenzene	0.0461	0.002	ug/g	ND	67.9	62-149			
1,4-Dichlorobenzene	0.0457	0.002	ug/g	ND	67.3	63-132			
1,1-Dichloroethane	0.0759	0.002	ug/g	ND	112	51-156			
1,2-Dichloroethane	0.0852	0.002	ug/g	ND	125	50-140			
1,1-Dichloroethylene	0.0577	0.002	ug/g	ND	84.9	43-153			
cis-1,2-Dichloroethylene	0.0698	0.002	ug/g	ND	103	58-145			
trans-1,2-Dichloroethylene	0.0548	0.003	ug/g	ND	80.6	51-145			
1,2-Dichloropropane	0.0865	0.002	ug/g	ND	127	56-136			
cis-1,3-Dichloropropylene	0.0912	0.002	ug/g	ND	134	54-141			
trans-1,3-Dichloropropylene	0.0869	0.002	ug/g	ND	128	61-140			
Ethylbenzene	0.0530	0.002	ug/g	ND	78.0	61-139			
Methylene Chloride	0.0856	0.010	ug/g	ND	126	58-149			
Styrene	0.0586	0.002	ug/g	ND	86.2	63-143			
1,1,1,2-Tetrachloroethane	0.0586	0.003	ug/g	ND	86.2	61-148			
1,1,2,2-Tetrachloroethane	0.0727	0.003	ug/g	ND	107	50-157			
Tetrachloroethylene	0.0423	0.002	ug/g	ND	62.3	51-145			
Toluene	0.0866	0.002	ug/g	ND	127	54-136			
1,1,1-Trichloroethane	0.0653	0.002	ug/g	ND	96.0	55-140			
1,1,2-Trichloroethane	0.0853	0.002	ug/g	ND	125	63-144			
Trichloroethylene	0.0730	0.003	ug/g	ND	107	52-135			
Trichlorofluoromethane	0.0571	0.005	ug/g	ND	83.9	37-155			
1,3,5-Trimethylbenzene	0.0451	0.003	ug/g	ND	66.3	61-151			
Vinyl chloride	0.0467	0.002	ug/g	ND	68.6	31-159			
m,p-Xylenes	0.106	0.002	ug/g	ND	77.7	61-139			
o-Xylene	0.0554	0.002	ug/g	ND	81.4	60-142			
Surrogate: 4-Bromofluorobenzene	*0.123*		*ug/g*		*90.4*	*83-134*			
Surrogate: Dibromofluoromethane	*0.168*		*ug/g*		*123*	*78-124*			
Surrogate: Toluene-d8	*0.122*		*ug/g*		*89.4*	*76-118*			

Certificate of Analysis

Report Date: 19-Jan-2009
Order Date:13-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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www.paracellabs.com

Chain of Custody Record
№ 53240
Pg. ___ of ___

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order #: 0903045

	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	VOC	Metals	PHC (F1 to F4)	PAH	PCBs									Hazardous? (Y/N)
1	MW09-3 SS1	S		1	Jan 12/09	X	X	X	X	X									
2	MW09-3 SS8	↓		↓	↓	↓	↓	↓	↓	↓									
3	MW09-2 SS1	↓		↓	↓	↓	↓	↓	↓	↓									
4	MW09-2 SS3	↓		↓	↓	↓	↓	↓	↓	↓									
5	MW09-1 SS1	↓		↓	↓	↓	↓	↓	↓	↓									
6	MW09-1 SS2	↓		↓	↓	↓	↓	↓	↓	↓									
7																			
8																			
9																			
10																			

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 13/09 Time: 2:13	Date: Time:	Date: Jan 13/09 Time: 2:13	Date: Jan 13, 09 Time: 2:23

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 56595

Report Date: 3-Mar-2009
Order Date: 25-Feb-2009
Order #: 0909120

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0909120-01	Comp. of all S1(5)

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Flashpoint	Penski Martin Closed Cup	2-Mar-09	2-Mar-09
REG 558 - Cyanide	MOE E3015- Auto Colour	3-Mar-09	3-Mar-09
REG 558 - Fluoride	EPA 340.2 - ISE	27-Feb-09	27-Feb-09
REG 558 - Mercury	EPA 7471A - Cold Vapour AA	26-Feb-09	26-Feb-09
REG 558 - Metals, ICP	EPA 6020: ICP-MS, digestion	27-Feb-09	27-Feb-09
REG 558 - NO3/NO2	EPA 300.1 - IC	27-Feb-09	27-Feb-09
REG 558 - PAHs	EPA 625 - GC-MS	27-Feb-09	27-Feb-09
REG 558 - PCBs	EPA 608 - GC-ECD	27-Feb-09	27-Feb-09
REG 558 - VOCs	EPA 624 - P&T GC-MS	2-Mar-09	3-Mar-09
Solids, %	Gravimetric, calculation	25-Feb-09	26-Feb-09
TCLP Metals/SVOCs - Extraction	EPA 1311 TCLP Extraction Procedure	26-Feb-09	26-Feb-09
TPH (diesel)	based on E3398/EPA3546 - GC-FID, extraction	27-Feb-09	27-Feb-09
TPH (heavy oil)	MOE E3398/EPA3546 - Gravimetric	27-Feb-09	2-Mar-09

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	Comp. of all S1(5)	-	-	-
	Sample Date:	23-Feb-09	-	-	-
	Sample ID:	0909120-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
Flashpoint	°C	>70	-	-	-
% Solids	0.1 % by Wt.	92.2	-	-	-
EPA 1311 - TCLP Leachate Inorganics					
Cyanide, free	0.002 mg/L	<0.002	-	-	-
Fluoride	0.05 mg/L	0.18	-	-	-
Arsenic	0.05 mg/L	<0.05	-	-	-
Barium	0.05 mg/L	0.51	-	-	-
Nitrate as N	1 mg/L	<1	-	-	-
Nitrite as N	1 mg/L	<1	-	-	-
Boron	0.05 mg/L	<0.05	-	-	-
Cadmium	0.01 mg/L	<0.01	-	-	-
Chromium	0.05 mg/L	<0.05	-	-	-
Lead	0.05 mg/L	<0.05	-	-	-
Mercury	0.005 mg/L	<0.005	-	-	-
Selenium	0.05 mg/L	<0.05	-	-	-
Silver	0.05 mg/L	<0.05	-	-	-
Uranium	0.05 mg/L	<0.05	-	-	-
Initial pH	1.00 pH Units dry	9.47	-	-	-
Final pH	1.00 pH Units dry	6.15	-	-	-
EPA 1311 - TCLP Leachate Organics					
Benzene	0.0005 mg/L	<0.0005	-	-	-
Carbon Tetrachloride	0.0005 mg/L	<0.0005	-	-	-
Chlorobenzene	0.0004 mg/L	<0.0004	-	-	-
Chloroform	0.0006 mg/L	<0.0006	-	-	-
1,2-Dichlorobenzene	0.0004 mg/L	<0.0004	-	-	-
1,4-Dichlorobenzene	0.0004 mg/L	<0.0004	-	-	-
1,2-Dichloroethane	0.0005 mg/L	<0.0005	-	-	-
1,1-Dichloroethylene	0.0006 mg/L	<0.0006	-	-	-
Methyl Ethyl Ketone (2-Butanone)	0.03 mg/L	<0.03	-	-	-
Methylene Chloride	0.004 mg/L	<0.004	-	-	-
Tetrachloroethylene	0.0005 mg/L	<0.0005	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	Comp. of all S1(5)	-	-	-
	Sample Date:	23-Feb-09	-	-	-
	Sample ID:	0909120-01	-	-	-
	MDL/Units	Soil	-	-	-
Trichloroethylene	0.0004 mg/L	<0.0004	-	-	-
Vinyl chloride	0.0005 mg/L	<0.0005	-	-	-
4-Bromofluorobenzene	Surrogate	99.5%	-	-	-
Dibromofluoromethane	Surrogate	97.0%	-	-	-
Toluene-d8	Surrogate	92.3%	-	-	-
Benzo[a]pyrene	0.0001 mg/L	<0.0001	-	-	-
Terphenyl-d14	Surrogate	96.1%	-	-	-
PCBs, total	0.003 mg/L	<0.003	-	-	-
Decachlorobiphenyl	Surrogate	104%	-	-	-
Hydrocarbons					
TPH (diesel)	10 ug/g dry	<10	-	-	-
TPH (heavy oil)	50 ug/g dry	76	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	ND	0.002	mg/L						
Fluoride	ND	0.05	mg/L						
Arsenic	ND	0.05	mg/L						
Barium	ND	0.05	mg/L						
Nitrate as N	ND	1	mg/L						
Nitrite as N	ND	1	mg/L						
Boron	ND	0.05	mg/L						
Cadmium	ND	0.01	mg/L						
Chromium	ND	0.05	mg/L						
Lead	ND	0.05	mg/L						
Mercury	ND	0.005	mg/L						
Selenium	ND	0.05	mg/L						
Silver	ND	0.05	mg/L						
Uranium	ND	0.05	mg/L						
EPA 1311 - TCLP Leachate Organics									
Benzene	ND	0.0005	mg/L						
Carbon Tetrachloride	ND	0.0005	mg/L						
Chlorobenzene	ND	0.0004	mg/L						
Chloroform	ND	0.0006	mg/L						
1,2-Dichlorobenzene	ND	0.0004	mg/L						
1,4-Dichlorobenzene	ND	0.0004	mg/L						
1,2-Dichloroethane	ND	0.0005	mg/L						
1,1-Dichloroethylene	ND	0.0006	mg/L						
Methyl Ethyl Ketone (2-Butanone)	ND	0.03	mg/L						
Methylene Chloride	ND	0.004	mg/L						
Tetrachloroethylene	ND	0.0005	mg/L						
Trichloroethylene	ND	0.0004	mg/L						
Vinyl chloride	ND	0.0005	mg/L						
Surrogate: 4-Bromofluorobenzene	*0.0857*		*mg/L*		*107*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0775*		*mg/L*		*96.9*	*78-124*			
Surrogate: Toluene-d8	*0.0833*		*mg/L*		*104*	*76-118*			
Benzo[a]pyrene	ND	0.0001	mg/L						
Surrogate: Terphenyl-d14	*0.175*		*mg/L*		*87.7*	*37.1-155.6*			
PCBs, total	ND	0.003	mg/L						
Surrogate: Decachlorobiphenyl	*0.00864*		*mg/L*		*86.4*	*62-138*			
Hydrocarbons									
TPH (diesel)	ND	10	ug/g						
TPH (heavy oil)	ND	50	ug/g						

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	ND	0.002	mg/L	ND				20	
Fluoride	0.18	0.05	mg/L	0.18			0.3	20	
Arsenic	ND	0.05	mg/L	ND				28.6	
Barium	0.099	0.05	mg/L	0.102			2.6	33.9	
Nitrate as N	ND	1	mg/L	ND				20	
Nitrite as N	ND	1	mg/L	ND				20	
Boron	0.497	0.05	mg/L	0.508			2.2	32.6	
Cadmium	ND	0.01	mg/L	ND				33.1	
Chromium	ND	0.05	mg/L	ND				31.7	
Lead	ND	0.05	mg/L	ND				31.9	
Mercury	0.0084	0.005	mg/L	0.0089			6.4	20	
Selenium	ND	0.05	mg/L	ND				27.9	
Silver	ND	0.05	mg/L	ND				28	
Uranium	ND	0.05	mg/L	ND				26.6	
EPA 1311 - TCLP Leachate Organics									
Benzene	0.0006	0.0005	mg/L	0.0009			45.5	25	QR-01
Carbon Tetrachloride	ND	0.0005	mg/L	ND				25	
Chlorobenzene	ND	0.0004	mg/L	ND				25	
Chloroform	ND	0.0006	mg/L	ND				25	
1,2-Dichlorobenzene	0.002	0.0004	mg/L	0.002			2.2	25	
1,4-Dichlorobenzene	0.006	0.0004	mg/L	0.006			0.2	25	
1,2-Dichloroethane	ND	0.0005	mg/L	ND				25	
1,1-Dichloroethylene	ND	0.0006	mg/L	ND				25	
Methyl Ethyl Ketone (2-Butanone)	ND	0.03	mg/L	ND				25	
Methylene Chloride	ND	0.004	mg/L	ND				25	
Tetrachloroethylene	ND	0.0005	mg/L	ND				25	
Trichloroethylene	ND	0.0004	mg/L	ND				25	
Vinyl chloride	ND	0.0005	mg/L	ND				25	
Surrogate: 4-Bromofluorobenzene	*0.0834*		*mg/L*	*ND*	*104*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0803*		*mg/L*	*ND*	*100*	*78-124*			
Surrogate: Toluene-d8	*0.0829*		*mg/L*	*ND*	*104*	*76-118*			
Benzo[a]pyrene	ND	0.0001	mg/L	ND				50	
Surrogate: Terphenyl-d14	*0.177*		*mg/L*	*ND*	*88.6*	*37.1-155.6*			
PCBs, total	ND	0.003	mg/L	ND				30	
Surrogate: Decachlorobiphenyl	*0.0105*		*mg/L*	*ND*	*105*	*62-138*			
Hydrocarbons									
TPH (diesel)	ND	10	ug/g dry	ND				50	
TPH (heavy oil)	ND	50	ug/g dry	75.9			200.0	34	QR-01
Physical Characteristics									
% Solids	64.3	0.1	% by Wt.	63.9			0.6	25	

PARACEL LABORATORIES LTD.

Order #: 0909120

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Inorganics									
Cyanide, free	0.024	0.002	mg/L	ND	71.6	60-136			
Fluoride	0.70	0.05	mg/L	0.18	103	0-200			
Arsenic	49.6		ug/L	1.72	95.8	83.1-118.6			
Barium	57.0		ug/L	10.2	93.6	83.4-116.1			
Nitrate as N	10	1	mg/L	ND	95.7	81-112			
Nitrite as N	9	1	mg/L	ND	85.2	76-107			
Boron	86.9		ug/L	50.8	72.2	70.9-127.7			
Cadmium	45.6		ug/L	0.084	91.0	77.9-118.7			
Chromium	50.6		ug/L	4.25	92.7	79.7-123.8			
Lead	44.9		ug/L	1.56	86.7	77.2-125.6			
Mercury	0.0398	0.005	mg/L	0.0089	103	78-134			
Selenium	47.5		ug/L	0.641	93.7	81.2-124.6			
Silver	44.6		ug/L	0.064	89.1	69.9-128.1			
Uranium	45.1		ug/L	0.008	90.3	69.6-130.7			
EPA 1311 - TCLP Leachate Organics									
Benzene	0.036	0.0005	mg/L	ND	90.0	55-141			
Carbon Tetrachloride	0.037	0.0005	mg/L	ND	93.3	49-149			
Chlorobenzene	0.041	0.0004	mg/L	ND	102	64-137			
Chloroform	0.035	0.0006	mg/L	ND	87.3	58-138			
1,2-Dichlorobenzene	0.039	0.0004	mg/L	ND	97.1	60-150			
1,4-Dichlorobenzene	0.039	0.0004	mg/L	ND	96.3	63-132			
1,2-Dichloroethane	0.040	0.0005	mg/L	ND	99.8	50-140			
1,1-Dichloroethylene	0.034	0.0006	mg/L	ND	86.0	43-153			
Methyl Ethyl Ketone (2-Butanone)	0.074	0.03	mg/L	ND	74.1	26-153			
Methylene Chloride	0.030	0.004	mg/L	ND	75.9	58-149			
Tetrachloroethylene	0.041	0.0005	mg/L	ND	104	51-145			
Trichloroethylene	0.032	0.0004	mg/L	ND	78.8	52-135			
Vinyl chloride	0.035	0.0005	mg/L	ND	88.0	31-159			
Surrogate: 4-Bromofluorobenzene	*0.0848*		*mg/L*		*106*	*83-134*			
Surrogate: Dibromofluoromethane	*0.0772*		*mg/L*		*96.5*	*78-124*			
Surrogate: Toluene-d8	*0.0834*		*mg/L*		*104*	*76-118*			
Benzo[a]pyrene	0.0512	0.0001	mg/L	ND	102	39-123			
Surrogate: Terphenyl-d14	*0.179*		*mg/L*		*89.6*	*37.1-155.6*			
PCBs, total	0.047	0.003	mg/L	ND	118	86-145			
Surrogate: Decachlorobiphenyl	*0.00856*		*mg/L*		*85.6*	*62-138*			
Hydrocarbons									
TPH (diesel)	216	10	ug/g	ND	108	49.3-134.8			
TPH (heavy oil)	830	50	ug/g	ND	83.0	69-125			

Certificate of Analysis

Report Date: 03-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

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e: paracel@paracellabs.com
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Chain of Custody Record

№ 56595

Company Name: TRCW Assoc
Contact Name: Mark McCalla
Address: 154 Colonnade Rd Nepean
Tel: 613-225-9940 Cell:
Email: mark.mccalla@trcwa.com

Project Ref: OTEN0019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: ☐ 1-day ☐ 2-day ☒ Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0909120	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	Metals	PAH	PCB									Hazardous? (Y/N)
1	BH16-S1	S		1	23/2/09	X	X	X	X	X									
2	BH16-S3	↓		↓	↓	↓	↓	↓	↓	↓									
3	BH16-S10.	↓		↓	↓	↓	↓	↓	↓	↓									
4	BH17-S1	↓		↓	↓	↓	↓	↓	↓	↓									
5	BH17-S2	↓		↓	↓	↓	↓	↓	↓	↓									
6	BH17-S10	↓		↓	↓	↓	↓	↓	↓	↓									
7	MW18-S1	↓		↓	↓	↓	↓	↓	↓	↓									
8	MW18-S10	↓		↓	↓	↓	↓	↓	↓	↓									
9	MW18-S100	↓		↓	↓	↓	↓	↓	↓	↓									
10	MW19-S1	↓		↓	24/2/09	↓	↓	↓	↓	↓									

Comments:

Relinquished By: Dorothy Wilroy Date: Time:	Received at Depot: Date: Time:	Received at Lab: Date: Feb 25/09 Time: 11:32	Verified By: Date: Feb 25/09 Time: 12:07

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements

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www.paracellabs.com

Chain of Custody Record

№ 56596

Company Name: TROW
Contact Name: Mark McCallum
Address: 154 Colonade Rd. Nepean
Tel: 613-225-9940 Cell:
Email: 613-225-9 mark.mccallum@trow.com

Project Ref: 6TEN0001940GP
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: | | 1-day | | 2-day | X | Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A–Air O–Other RDW–Regulated Drinking Water

Paracel Order # 0909120

	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	Metals	PAH	PCB	WST Organics Pest. Pes								Hazardous? (Y/N)
1	MW19-S9	S		1	24/2/09	X	X	X	X	X									
2	MW19-S100	↓		↓	↓	↓	↓	↓	↓	↓									
3	MW20-S1	↓		↓	↓	↓	↓	↓	↓	↓									
4	MW20-S10	↓		↓	↓	↓	↓	↓	↓	↓									
5	MW20-S7	↓		↓	↓	↓	↓	↓	↓	↓									
6																			
7	COMP of all S1(5)	S		1	23/02/09						X								
8																			
9																			
10																			

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Darryl Lilay			
Date: 25/2/09 Time: 11:30	Date: Time:	Date: 26/02/09 Time: 11:32	Date: Feb 28/09 Time: 12:07

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 56595

Report Date: 6-Mar-2009
Order Date: 25-Feb-2009
Revised Report **Order #: 0909119**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0909119-01	BH16-S1
0909119-02	BH16-S3
0909119-04	BH17-S1
0909119-05	BH17-S2
0909119-07	MW18-S1
0909119-08	MW18-S10
0909119-10	MW19-S1
0909119-11	MW19-S9
0909119-13	MW20-S1
0909119-14	MW20-S10
0909119-15	MW20-S7

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
CCME PHC F1	CWS Tier 1 - P&T GC-FID	25-Feb-09	27-Feb-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	26-Feb-09	27-Feb-09
Metals	EPA 6020 - Digestion - ICP-MS	26-Feb-09	27-Feb-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	26-Feb-09	26-Feb-09
PCBs, total	SW846 8080 - GC-ECD	26-Feb-09	26-Feb-09
Solids, %	Gravimetric, calculation	25-Feb-09	25-Feb-09
VOCs	EPA 8260 - P&T GC-MS	25-Feb-09	26-Feb-09

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	BH16-S1	BH16-S3	BH17-S1	BH17-S2
	Sample Date:	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09
	Sample ID:	0909119-01	0909119-02	0909119-04	0909119-05
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	93.8	91.7	89.1	90.5
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	4	3	1	2
Barium	10 ug/g dry	28	41	33	103
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	9	10	12	16
Cobalt	5 ug/g dry	5	<5	<5	5
Copper	5 ug/g dry	9	11	7	24
Lead	1 ug/g dry	20	20	5	32
Molybdenum	1 ug/g dry	4	2	<1	<1
Nickel	5 ug/g dry	13	10	8	13
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	15	17	23	24
Zinc	20 ug/g dry	<20	21	<20	34
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	BH16-S1	BH16-S3	BH17-S1	BH17-S2
	Sample Date:	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09
	Sample ID:	0909119-01	0909119-02	0909119-04	0909119-05
	MDL/Units	Soil	Soil	Soil	Soil
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	107%	107%	107%	108%
Dibromofluoromethane	Surrogate	99.8%	99.2%	99.6%	99.0%
Toluene-d8	Surrogate	107%	96.1%	97.6%	96.0%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	<10	<10	<10	68

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	BH16-S1	BH16-S3	BH17-S1	BH17-S2
	Sample Date:	23-Feb-09	23-Feb-09	23-Feb-09	23-Feb-09
	Sample ID:	0909119-01	0909119-02	0909119-04	0909119-05
	MDL/Units	Soil	Soil	Soil	Soil
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	38
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.04
Acenaphthylene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.07
Anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.20
Benzo[a]anthracene	0.02 ug/g dry	0.02	0.05	<0.02	0.50
Benzo[a]pyrene	0.02 ug/g dry	0.02	0.04	<0.02	0.44
Benzo[b]fluoranthene	0.02 ug/g dry	0.03	0.05	<0.02	0.62
Benzo[g,h,i]perylene	0.02 ug/g dry	0.02	0.03	<0.02	0.27
Benzo[k]fluoranthene	0.02 ug/g dry	<0.02	0.02	<0.02	0.31
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.03	0.05	<0.02	0.56
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.06
Fluoranthene	0.02 ug/g dry	0.07	0.08	<0.02	1.01
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.05
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.02	<0.02	0.23
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.05
Naphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.06
Phenanthrene	0.02 ug/g dry	0.06	0.04	<0.02	0.60
Pyrene	0.02 ug/g dry	0.11	0.08	<0.02	0.95
2-Fluorobiphenyl	Surrogate	120%	113%	121%	112%
Terphenyl-d14	Surrogate	94.6%	86.1%	97.5%	84.4%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	108%	96.3%	99.0%	83.4%

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW18-S1	MW18-S10	MW19-S1	MW19-S9
	Sample Date:	23-Feb-09	23-Feb-09	24-Feb-09	24-Feb-09
	Sample ID:	0909119-07	0909119-08	0909119-10	0909119-11
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	94.2	90.3	96.1	93.9
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	2	4	<1	2
Barium	10 ug/g dry	24	196	35	99
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	0.7	<0.5	<0.5
Chromium	5 ug/g dry	10	23	9	44
Cobalt	5 ug/g dry	<5	6	<5	5
Copper	5 ug/g dry	6	99	6	36
Lead	1 ug/g dry	7	225	5	69
Molybdenum	1 ug/g dry	2	<1	<1	<1
Nickel	5 ug/g dry	8	21	6	13
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	19	25	19	19
Zinc	20 ug/g dry	<20	188	<20	54
Volatiles					
Benzene	0.03 ug/g dry	-	0.3 [2]	-	-
Bromodichloromethane	0.02 ug/g dry	-	<0.02 [2]	-	-
Bromoform	0.04 ug/g dry	-	<0.04 [2]	-	-
Bromomethane	0.05 ug/g dry	-	<0.05 [2]	-	-
Carbon Tetrachloride	0.03 ug/g dry	-	<0.03 [2]	-	-
Chlorobenzene	0.02 ug/g dry	-	0.3 [2]	-	-
Chloroethane	0.05 ug/g dry	-	<0.05 [2]	-	-
Chloroform	0.03 ug/g dry	-	<0.03 [2]	-	-
Chloromethane	0.2 ug/g dry	-	<0.2 [2]	-	-
Dibromochloromethane	0.02 ug/g dry	-	<0.02 [2]	-	-
1,2-Dibromoethane	0.01 ug/g dry	-	<0.01 [2]	-	-
1,2-Dichlorobenzene	0.02 ug/g dry	-	<0.02 [2]	-	-
1,3-Dichlorobenzene	0.05 ug/g dry	-	<0.05 [2]	-	-

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Client PO:
Project Description: OTEN00019406P

	Client ID:	MW18-S1	MW18-S10	MW19-S1	MW19-S9
	Sample Date:	23-Feb-09	23-Feb-09	24-Feb-09	24-Feb-09
	Sample ID:	0909119-07	0909119-08	0909119-10	0909119-11
	MDL/Units	Soil	Soil	Soil	Soil
1,4-Dichlorobenzene	0.02 ug/g dry	-	<0.02 [2]	-	-
1,1-Dichloroethane	0.03 ug/g dry	-	<0.03 [2]	-	-
1,2-Dichloroethane	0.02 ug/g dry	-	<0.02 [2]	-	-
1,1-Dichloroethylene	0.03 ug/g dry	-	<0.03 [2]	-	-
cis-1,2-Dichloroethylene	0.02 ug/g dry	-	<0.02 [2]	-	-
trans-1,2-Dichloroethylene	0.05 ug/g dry	-	<0.05 [2]	-	-
1,2-Dichloropropane	0.03 ug/g dry	-	<0.03 [2]	-	-
cis-1,3-Dichloropropylene	0.02 ug/g dry	-	<0.02 [2]	-	-
trans-1,3-Dichloropropylene	0.02 ug/g dry	-	<0.02 [2]	-	-
Ethylbenzene	0.05 ug/g dry	-	1.6 [2]	-	-
Methylene Chloride	0.2 ug/g dry	-	<0.2 [2]	-	-
Styrene	0.02 ug/g dry	-	<0.02 [2]	-	-
1,1,1,2-Tetrachloroethane	0.03 ug/g dry	-	<0.03 [2]	-	-
1,1,2,2-Tetrachloroethane	0.03 ug/g dry	-	<0.03 [2]	-	-
Tetrachloroethylene	0.02 ug/g dry	-	<0.02 [2]	-	-
Toluene	0.05 ug/g dry	-	0.2 [2]	-	-
1,1,1-Trichloroethane	0.02 ug/g dry	-	<0.02 [2]	-	-
1,1,2-Trichloroethane	0.03 ug/g dry	-	<0.03 [2]	-	-
Trichloroethylene	0.03 ug/g dry	-	<0.03 [2]	-	-
Trichlorofluoromethane	0.05 ug/g dry	-	<0.05 [2]	-	-
1,3,5-Trimethylbenzene	0.03 ug/g dry	-	0.2 [2]	-	-
Vinyl chloride	0.03 ug/g dry	-	<0.03 [2]	-	-
m,p-Xylenes	0.05 ug/g dry	-	2.9 [2]	-	-
o-Xylene	0.05 ug/g dry	-	0.3 [2]	-	-
4-Bromofluorobenzene	Surrogate	-	107% [2]	-	-
Dibromofluoromethane	Surrogate	-	107% [2]	-	-
Toluene-d8	Surrogate	-	101% [2]	-	-
Benzene	0.002 ug/g dry	<0.002	-	<0.002	0.005
Bromodichloromethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	-	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	-	<0.002	<0.002

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Project Description: OTEN00019406P

	Client ID:	MW18-S1	MW18-S10	MW19-S1	MW19-S9
	Sample Date:	23-Feb-09	23-Feb-09	24-Feb-09	24-Feb-09
	Sample ID:	0909119-07	0909119-08	0909119-10	0909119-11
	MDL/Units	Soil	Soil	Soil	Soil
Chlorobenzene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	-	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	-	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	-	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	-	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	-	<0.002	0.005
Methylene Chloride	0.010 ug/g dry	<0.010	-	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	-	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	-	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	-	<0.002	0.007
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	-	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	-	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	-	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	-	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	-	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	-	<0.002	0.017
o-Xylene	0.002 ug/g dry	<0.002	-	<0.002	0.006

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Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW18-S1	MW18-S10	MW19-S1	MW19-S9
	Sample Date:	23-Feb-09	23-Feb-09	24-Feb-09	24-Feb-09
	Sample ID:	0909119-07	0909119-08	0909119-10	0909119-11
	MDL/Units	Soil	Soil	Soil	Soil
4-Bromofluorobenzene	Surrogate	107%	-	107%	107%
Dibromofluoromethane	Surrogate	99.1%	-	99.0%	99.3%
Toluene-d8	Surrogate	96.7%	-	97.4%	97.5%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	289	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	607	<10	77
F3 PHCs (C16-C34)	10 ug/g dry	21	551	<10	187
F4 PHCs (C34-C50)	10 ug/g dry	10	18	<10	69
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.29	0.65	0.53
Acenaphthylene	0.02 ug/g dry	<0.02	0.23	0.31	0.51
Anthracene	0.02 ug/g dry	<0.02	0.46	1.68	1.57
Benzo[a]anthracene	0.02 ug/g dry	<0.02	0.77	3.16	2.83
Benzo[a]pyrene	0.02 ug/g dry	<0.02	0.73	2.61	2.28
Benzo[b]fluoranthene	0.02 ug/g dry	<0.02	1.00	3.86	2.99
Benzo[g,h,i]perylene	0.02 ug/g dry	<0.02	0.49	1.43	1.22
Benzo[k]fluoranthene	0.02 ug/g dry	<0.02	0.49	2.01	1.32
Biphenyl	0.02 ug/g dry	<0.02	0.15	0.06	0.10
Chrysene	0.02 ug/g dry	<0.02	0.91	3.32	2.96
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	0.13	0.49	0.39
Fluoranthene	0.02 ug/g dry	<0.02	1.42	5.59	4.43
Fluorene	0.02 ug/g dry	<0.02	0.44	0.95	0.94
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.43	1.43	1.13
1-Methylnaphthalene	0.02 ug/g dry	<0.02	1.16	0.14	0.24
2-Methylnaphthalene	0.02 ug/g dry	<0.02	1.88	0.18	0.33
Naphthalene	0.02 ug/g dry	<0.02	1.56	0.58	0.50
Phenanthrene	0.02 ug/g dry	<0.02	1.59	5.08	4.27
Pyrene	0.02 ug/g dry	<0.02	1.34	4.81	4.19
2-Fluorobiphenyl	Surrogate	121%	112%	133%	115%
Terphenyl-d14	Surrogate	88.3%	85.3%	107%	96.3%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05

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Client PO:
Project Description: OTEN00019406P

	Client ID:	MW18-S1	MW18-S10	MW19-S1	MW19-S9
	Sample Date:	23-Feb-09	23-Feb-09	24-Feb-09	24-Feb-09
	Sample ID:	0909119-07	0909119-08	0909119-10	0909119-11
	MDL/Units	Soil	Soil	Soil	Soil
Decachlorobiphenyl	Surrogate	106%	89.8%	95.0%	105%

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Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW20-S1	MW20-S10	MW20-S7	-
	Sample Date:	24-Feb-09	24-Feb-09	24-Feb-09	-
	Sample ID:	0909119-13	0909119-14	0909119-15	-
	MDL/Units	Soil	Soil	Soil	-
Physical Characteristics					
% Solids	0.1 % by Wt.	93.6	93.7	84.2	-
Metals					
Antimony	1 ug/g dry	<1	<1	<1	-
Arsenic	1 ug/g dry	2	2	2	-
Barium	10 ug/g dry	100	93	115	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Chromium	5 ug/g dry	19	20	31	-
Cobalt	5 ug/g dry	5	5	6	-
Copper	5 ug/g dry	24	20	57	-
Lead	1 ug/g dry	100	89	97	-
Molybdenum	1 ug/g dry	1	1	<1	-
Nickel	5 ug/g dry	15	15	17	-
Selenium	1 ug/g dry	<1	<1	<1	-
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	-
Thallium	1 ug/g dry	<1	<1	<1	-
Vanadium	10 ug/g dry	20	20	25	-
Zinc	20 ug/g dry	76	61	69	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	-
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	-
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-

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Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW20-S1	MW20-S10	MW20-S7	-
	Sample Date:	24-Feb-09	24-Feb-09	24-Feb-09	-
	Sample ID:	0909119-13	0909119-14	0909119-15	-
	MDL/Units	Soil	Soil	Soil	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	-
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	-
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	-
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
4-Bromofluorobenzene	Surrogate	107%	107%	107%	-
Dibromofluoromethane	Surrogate	99.8%	99.1%	99.4%	-
Toluene-d8	Surrogate	97.3%	95.8%	95.8%	-

Hydrocarbons

F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	-
F2 PHCs (C10-C16)	10 ug/g dry	21	19	177	-
F3 PHCs (C16-C34)	10 ug/g dry	161	106	51	-
F4 PHCs (C34-C50)	10 ug/g dry	108	80	<10	-

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Client PO:
Project Description: OTEN00019406P

	Client ID:	MW20-S1	MW20-S10	MW20-S7	-
	Sample Date:	24-Feb-09	24-Feb-09	24-Feb-09	-
	Sample ID:	0909119-13	0909119-14	0909119-15	-
	MDL/Units	Soil	Soil	Soil	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.31	0.21	0.15	-
Acenaphthylene	0.02 ug/g dry	0.44	0.23	0.16	-
Anthracene	0.02 ug/g dry	1.63	0.90	0.45	-
Benzo[a]anthracene	0.02 ug/g dry	2.50	1.50	0.76	-
Benzo[a]pyrene	0.02 ug/g dry	2.05	1.30	0.65	-
Benzo[b]fluoranthene	0.02 ug/g dry	4.27	1.88	0.87	-
Benzo[g,h,i]perylene	0.02 ug/g dry	1.09	0.66	0.36	-
Benzo[k]fluoranthene	0.02 ug/g dry	1.46	0.86	0.43	-
Biphenyl	0.02 ug/g dry	0.05	0.03	0.04	-
Chrysene	0.02 ug/g dry	2.46	1.53	0.79	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.32	0.22	0.10	-
Fluoranthene	0.02 ug/g dry	4.25	2.59	1.36	-
Fluorene	0.02 ug/g dry	0.66	0.39	0.32	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	1.00	0.64	0.34	-
1-Methylnaphthalene	0.02 ug/g dry	0.14	0.09	0.61	-
2-Methylnaphthalene	0.02 ug/g dry	0.15	0.10	0.52	-
Naphthalene	0.02 ug/g dry	0.18	0.13	0.29	-
Phenanthrene	0.02 ug/g dry	3.26	2.10	1.22	-
Pyrene	0.02 ug/g dry	3.82	2.31	1.29	-
2-Fluorobiphenyl	Surrogate	116%	112%	110%	-
Terphenyl-d14	Surrogate	102%	101%	98.8%	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Decachlorobiphenyl	Surrogate	74.8%	83.6%	66.3%	-

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Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Lead	ND	1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.0788*		*ug/g*		*78.8*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*1.50*	*0.01*	*ug/g*		*113*	*32-156*			
Surrogate: Terphenyl-d14	*1.25*	*0.01*	*ug/g*		*93.6*	*39-146*			
Volatiles									
Benzene	ND	0.03	ug/g						
Bromodichloromethane	ND	0.02	ug/g						
Bromoform	ND	0.04	ug/g						
Bromomethane	ND	0.05	ug/g						
Carbon Tetrachloride	ND	0.03	ug/g						

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Chlorobenzene	ND	0.02	ug/g						
Chloroethane	ND	0.05	ug/g						
Chloroform	ND	0.03	ug/g						
Chloromethane	ND	0.2	ug/g						
Dibromochloromethane	ND	0.02	ug/g						
1,2-Dibromoethane	ND	0.01	ug/g						
1,2-Dichlorobenzene	ND	0.02	ug/g						
1,3-Dichlorobenzene	ND	0.05	ug/g						
1,4-Dichlorobenzene	ND	0.02	ug/g						
1,1-Dichloroethane	ND	0.03	ug/g						
1,2-Dichloroethane	ND	0.02	ug/g						
1,1-Dichloroethylene	ND	0.03	ug/g						
cis-1,2-Dichloroethylene	ND	0.02	ug/g						
trans-1,2-Dichloroethylene	ND	0.05	ug/g						
1,2-Dichloropropane	ND	0.03	ug/g						
cis-1,3-Dichloropropylene	ND	0.02	ug/g						
trans-1,3-Dichloropropylene	ND	0.02	ug/g						
Ethylbenzene	ND	0.05	ug/g						
Methylene Chloride	ND	0.2	ug/g						
Styrene	ND	0.02	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.03	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.03	ug/g						
Tetrachloroethylene	ND	0.02	ug/g						
Toluene	ND	0.05	ug/g						
1,1,1-Trichloroethane	ND	0.02	ug/g						
1,1,2-Trichloroethane	ND	0.03	ug/g						
Trichloroethylene	ND	0.03	ug/g						
Trichlorofluoromethane	ND	0.05	ug/g						
1,3,5-Trimethylbenzene	ND	0.03	ug/g						
Vinyl chloride	ND	0.03	ug/g						
m,p-Xylenes	ND	0.05	ug/g						
o-Xylene	ND	0.05	ug/g						
Surrogate: 4-Bromofluorobenzene	*6.96*		*ug/g*		*87.0*	*83-134*			
Surrogate: Dibromofluoromethane	*8.22*		*ug/g*		*103*	*78-124*			
Surrogate: Toluene-d8	*9.37*		*ug/g*		*117*	*76-118*			
Benzene	ND	0.002	ug/g						
Bromodichloromethane	ND	0.002	ug/g						
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.010	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: 4-Bromofluorobenzene	*0.149*		*ug/g*		*109*	*83-134*			
Surrogate: Dibromofluoromethane	*0.136*		*ug/g*		*99.6*	*78-124*			
Surrogate: Toluene-d8	*0.140*		*ug/g*		*103*	*76-118*			

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g dry	ND				32	
F2 PHCs (C10-C16)	ND	10	ug/g dry	ND				50	
F3 PHCs (C16-C34)	ND	10	ug/g dry	33				50	QR-01
F4 PHCs (C34-C50)	ND	10	ug/g dry	20				50	QR-01
Metals									
Antimony	1.6	1	ug/g dry	4.9			99.8	26	QR-01
Arsenic	1.0	1	ug/g dry	1.1			200.0	35	QR-01
Barium	44.7	10	ug/g dry	45.3			1.2	34	
Beryllium	ND	0.5	ug/g dry	ND				25	
Cadmium	ND	0.5	ug/g dry	ND				33	
Chromium	14.5	5	ug/g dry	14.8			2.4	32	
Cobalt	ND	5	ug/g dry	ND				32	
Copper	10.8	5	ug/g dry	10.9			0.9	32	
Lead	91.1	1	ug/g dry	92.3			1.4	44	
Molybdenum	ND	1	ug/g dry	ND				29	
Nickel	9.6	5	ug/g dry	9.9			3.5	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	17.1	10	ug/g dry	17.2			0.3	27	
Zinc	278	20	ug/g dry	282			1.7	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.113*		*ug/g dry*	*ND*	*78.3*	*40-147*			
Physical Characteristics									
% Solids	64.3	0.1	% by Wt.	63.9			0.6	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g dry	ND				50	
Acenaphthylene	ND	0.02	ug/g dry	ND				50	
Anthracene	ND	0.02	ug/g dry	ND				50	
Benzo[a]anthracene	ND	0.02	ug/g dry	ND				50	
Benzo[a]pyrene	ND	0.02	ug/g dry	0.022			200.0	50	QR-01
Benzo[b]fluoranthene	0.020	0.02	ug/g dry	0.028			32.0	50	
Benzo[g,h,i]perylene	ND	0.02	ug/g dry	0.025			200.0	50	QR-01
Benzo[k]fluoranthene	ND	0.02	ug/g dry	ND				50	
Biphenyl	ND	0.02	ug/g dry	ND				50	
Chrysene	0.022	0.02	ug/g dry	0.029			27.6	50	
Dibenzo[a,h]anthracene	ND	0.02	ug/g dry	ND				50	
Fluoranthene	0.025	0.02	ug/g dry	0.073			96.7	50	QR-01
Fluorene	ND	0.02	ug/g dry	ND				50	
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g dry	ND				50	
1-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
2-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
Naphthalene	ND	0.02	ug/g dry	ND				50	
Phenanthrene	0.023	0.02	ug/g dry	0.057			83.6	50	QR-01
Pyrene	0.032	0.02	ug/g dry	0.113			112.0	50	QR-01
Surrogate: 2-Fluorobiphenyl	*1.62*	*0.01*	*ug/g dry*	*ND*	*114*	*32-156*			
Surrogate: Terphenyl-d14	*1.27*	*0.01*	*ug/g dry*	*ND*	*89.1*	*39-146*			
Volatiles									
Benzene	ND	0.03	ug/g dry	ND				50	

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	ND	0.02	ug/g dry	ND				50	
Bromoform	ND	0.04	ug/g dry	ND				50	
Bromomethane	ND	0.05	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.03	ug/g dry	ND				50	
Chlorobenzene	ND	0.02	ug/g dry	ND				50	
Chloroethane	ND	0.05	ug/g dry	ND				50	
Chloroform	ND	0.03	ug/g dry	ND				32	
Chloromethane	ND	0.2	ug/g dry	ND				50	
Dibromochloromethane	ND	0.02	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.01	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.02	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.05	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.02	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.03	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.02	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.03	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.02	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.05	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.03	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.02	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.02	ug/g dry	ND				50	
Ethylbenzene	ND	0.05	ug/g dry	ND				34	
Methylene Chloride	ND	0.2	ug/g dry	ND				50	
Styrene	ND	0.02	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.03	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.03	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.02	ug/g dry	ND				32	
Toluene	ND	0.05	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.02	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.03	ug/g dry	ND				50	
Trichloroethylene	ND	0.03	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.05	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.03	ug/g dry	ND				43	
Vinyl chloride	ND	0.03	ug/g dry	ND				50	
m,p-Xylenes	ND	0.05	ug/g dry	ND				35	
o-Xylene	ND	0.05	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*10.1*		*ug/g dry*	*ND*	*92.6*	*83-134*			
Surrogate: Dibromofluoromethane	*9.20*		*ug/g dry*	*ND*	*84.6*	*78-124*			
Surrogate: Toluene-d8	*10.3*		*ug/g dry*	*ND*	*95.2*	*76-118*			
Benzene	ND	0.002	ug/g dry	ND				50	
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	ND	0.002	ug/g dry	ND				34	
Methylene Chloride	ND	0.010	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	ND	0.002	ug/g dry	ND				35	
o-Xylene	ND	0.002	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*0.153*		*ug/g dry*	*ND*	*108*	*83-134*			
Surrogate: Dibromofluoromethane	*0.141*		*ug/g dry*	*ND*	*99.8*	*78-124*			
Surrogate: Toluene-d8	*0.140*		*ug/g dry*	*ND*	*98.8*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0909119

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	98	10	ug/g	ND	97.6	80-120			
F2 PHCs (C10-C16)	61	10	ug/g	ND	76.3	61-129			
F3 PHCs (C16-C34)	220	10	ug/g	ND	110	61-129			
F4 PHCs (C34-C50)	146	10	ug/g	ND	121	61-129			
Metals									
Antimony	44.7		ug/L	1.9	85.5	78-126			
Arsenic	47.6		ug/L	0.5	94.2	80-120			
Barium	69.3		ug/L	18.1	102	83-116			
Beryllium	52.2		ug/L	0.08	104	72-123			
Cadmium	47.3		ug/L	0.13	94.3	78-118			
Chromium	54.7		ug/L	5.9	97.5	80-124			
Cobalt	50.9		ug/L	1.4	98.8	78-125			
Copper	52.9		ug/L	4.4	97.1	75-123			
Lead	87.0		ug/L	36.9	100	80-120			
Molybdenum	47.1		ug/L	0.4	93.4	82-119			
Nickel	52.8		ug/L	4.0	97.7	78-119			
Selenium	48.9		ug/L	0.4	97.1	81-125			
Silver	46.8		ug/L	0.07	93.4	70-128			
Thallium	52.3		ug/L	0.05	104	82-127			
Vanadium	56.7		ug/L	6.9	99.7	82-123			
Zinc	159		ug/L	113	91.5	78-130			
PCBs									
PCBs, total	0.455	0.05	ug/g	ND	114	58-147			
Surrogate: Decachlorobiphenyl	*0.0979*		*ug/g*		*97.9*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.160	0.02	ug/g	ND	95.9	31-121			
Acenaphthylene	0.161	0.02	ug/g	ND	96.6	26-124			
Anthracene	0.199	0.02	ug/g	ND	119	29-128			
Benzo[a]anthracene	0.182	0.02	ug/g	ND	109	29-129			
Benzo[a]pyrene	0.161	0.02	ug/g	ND	96.8	29-111			
Benzo[b]fluoranthene	0.184	0.02	ug/g	ND	111	26-111			
Benzo[g,h,i]perylene	0.157	0.02	ug/g	ND	94.2	23-128			
Benzo[k]fluoranthene	0.179	0.02	ug/g	ND	107	23-135			
Biphenyl	0.156	0.02	ug/g	ND	93.6	31-107			
Chrysene	0.193	0.02	ug/g	ND	116	28-136			
Dibenzo[a,h]anthracene	0.147	0.02	ug/g	ND	88.1	20-131			
Fluoranthene	0.172	0.02	ug/g	ND	103	24-131			
Fluorene	0.177	0.02	ug/g	ND	106	28-123			
Indeno[1,2,3-cd]pyrene	0.147	0.02	ug/g	ND	88.0	20-128			
1-Methylnaphthalene	0.125	0.02	ug/g	ND	75.0	24-127			
2-Methylnaphthalene	0.129	0.02	ug/g	ND	77.6	21-127			
Naphthalene	0.117	0.02	ug/g	ND	70.4	29-118			
Phenanthrene	0.180	0.02	ug/g	ND	108	34-108			
Pyrene	0.180	0.02	ug/g	ND	108	29-131			
Surrogate: 2-Fluorobiphenyl	*1.49*	0.01	*ug/g*		*111*	*32-156*			
Surrogate: Terphenyl-d14	*1.24*	0.01	*ug/g*		*92.8*	*39-146*			
Volatiles									
Benzene	0.0693	0.002	ug/g	ND	102	55-141			
Bromodichloromethane	0.0643	0.002	ug/g	ND	94.5	52-139			
Bromoform	0.0611	0.002	ug/g	ND	89.9	52-170			
Bromomethane	0.0457	0.003	ug/g	ND	67.2	32-138			
Carbon Tetrachloride	0.0800	0.002	ug/g	ND	118	49-149			

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Chlorobenzene	0.0766	0.002	ug/g	ND	113	64-137			
Chloroethane	0.0374	0.005	ug/g	ND	55.0	39-152			
Chloroform	0.0629	0.003	ug/g	ND	92.4	58-138			
Chloromethane	0.0430	0.020	ug/g	ND	63.2	24-163			
Dibromochloromethane	0.0699	0.002	ug/g	ND	103	61-153			
1,2-Dibromoethane	0.0648	0.002	ug/g	ND	95.3	61-145			
1,2-Dichlorobenzene	0.0771	0.002	ug/g	ND	113	60-150			
1,3-Dichlorobenzene	0.0840	0.002	ug/g	ND	124	62-149			
1,4-Dichlorobenzene	0.0805	0.002	ug/g	ND	118	63-132			
1,1-Dichloroethane	0.0641	0.002	ug/g	ND	94.2	51-156			
1,2-Dichloroethane	0.0621	0.002	ug/g	ND	91.3	50-140			
1,1-Dichloroethylene	0.0645	0.002	ug/g	ND	94.8	43-153			
cis-1,2-Dichloroethylene	0.0734	0.002	ug/g	ND	108	58-145			
trans-1,2-Dichloroethylene	0.0609	0.003	ug/g	ND	89.6	51-145			
1,2-Dichloropropane	0.0655	0.002	ug/g	ND	96.3	56-136			
cis-1,3-Dichloropropylene	0.0722	0.002	ug/g	ND	106	54-141			
trans-1,3-Dichloropropylene	0.0719	0.002	ug/g	ND	106	61-140			
Ethylbenzene	0.0761	0.002	ug/g	ND	112	61-139			
Methylene Chloride	0.0744	0.010	ug/g	ND	109	58-149			
Styrene	0.0781	0.002	ug/g	ND	115	63-143			
1,1,1,2-Tetrachloroethane	0.0739	0.003	ug/g	ND	109	61-148			
1,1,2,2-Tetrachloroethane	0.0749	0.003	ug/g	ND	110	50-157			
Tetrachloroethylene	0.0755	0.002	ug/g	ND	111	51-145			
Toluene	0.0724	0.002	ug/g	ND	107	54-136			
1,1,1-Trichloroethane	0.0726	0.002	ug/g	ND	107	55-140			
1,1,2-Trichloroethane	0.0596	0.002	ug/g	ND	87.6	63-144			
Trichloroethylene	0.0635	0.003	ug/g	ND	93.3	52-135			
Trichlorofluoromethane	0.0626	0.005	ug/g	ND	92.0	37-155			
1,3,5-Trimethylbenzene	0.101	0.003	ug/g	ND	149	61-151			
Vinyl chloride	0.0563	0.002	ug/g	ND	82.8	31-159			
m,p-Xylenes	0.174	0.002	ug/g	ND	128	61-139			
o-Xylene	0.0843	0.002	ug/g	ND	124	60-142			
Surrogate: 4-Bromofluorobenzene	*0.137*		*ug/g*		*101*	*83-134*			
Surrogate: Dibromofluoromethane	*0.143*		*ug/g*		*105*	*78-124*			
Surrogate: Toluene-d8	*0.127*		*ug/g*		*93.1*	*76-118*			

Certificate of Analysis

Report Date: 06-Mar-2009
Order Date:25-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.
2- VOC02 :Not able to complete VOC-low level analysis due to elevated hydrocarbon background. VOC-high level analysis completed in its place.

Sample Data Revisions

None

Work Order Revisions/Comments:

Revision 1 - This report includes additional sample data.

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Ottawa, Ontario K1G 4J8
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e: paracel@paracellabs.com
www.paracellabs.com

Chain of Custody Record

№ 56595

Company Name: TROW ASSOC
Contact Name: Mark McCalla
Address: 154 Colonade Rd Nepean
Tel: 613-225-9940 Cell:
Email: mark.mccalla@trow.com

Project Ref: OTEN00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [ ] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0909119	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	Metals.	PAH	PCB									Hazardous? (Y/N)
1	BH16-S1	S		1	23/2/09	X	X	X	X	X									
2	BH16-S3																		
3	BH16-S10.																		
4	BH17-S1																		
5	BH17-S2																		
6	BH17-S10																		
7	MW18-S1																		
8	MW18-S10																		
9	MW18-S100																		
10	MW19-S1				24/2/09														

Comments:

Relinquished By: Dorcy Wilroy Date: Time:	Received at Depot: Date: Time:	Received at Lab: Date: Feb. 25/09 Time: 11:32	Verified By: Date: Feb 25/09 Time: 12:07

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Chain of Custody Record

№ 56596

Company Name: TROW
Contact Name: Mark McCalla
Address: 154 Colonade Rd. Nepean
Tel: 613-225-9940 Cell:
Email: ~~613-225-9~~ mark.mccalla@trow.com

Project Ref: OTEN000194061P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

	Sample Information					Analysis Required													
	Paracel Order # 0909119 / Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	Metals	PAH	PCB	WSTI Ocknanic Det. Qty								Hazardous? (Y/N)
1	MW19-S9	S		1	24/2/09	X	X	X	X	X									
2	MW19-S100	↓		↓	↓	↓	↓	↓	↓	↓									
3	MW20-S1	↓		↓	↓	↓	↓	↓	↓	↓									
4	MW20-S10	↓		↓	↓	↓	↓	↓	↓	↓									
5	MW20-S7	↓		↓	↓	↓	↓	↓	↓	↓									
6																			
7	COMP of all S1(s)	S		1	23/02/09						X								
8																			
9																			
10																			

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Daragh Lilroy Date: 25/2/09 Time: 11:30	Date: Time:	Date: Feb 25/09 Time: 11:32	Date: Feb 25/09 Time: 12:07

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 55424

Report Date: 5-Mar-2009
Order Date: 27-Feb-2009
Revised Report **Order #: 0909192**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0909192-01	MW21-S1
0909192-02	MW21-S7
0909192-03	MW22-S1
0909192-04	MW22-S6
0909192-05	MW24-S1
0909192-06	MW24-S3
0909192-07	MW25-S1
0909192-08	MW25-S6
0909192-09	MW23-S1
0909192-10	MW23-S6

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	2-Mar-09	3-Mar-09
CCME PHC F1	CWS Tier 1 - P&T GC-FID	27-Feb-09	28-Feb-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	2-Mar-09	2-Mar-09
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	3-Mar-09	3-Mar-09
Mercury	EPA 7471A - CVAA, digestion	2-Mar-09	2-Mar-09
Metals	EPA 6020 - Digestion - ICP-MS	2-Mar-09	2-Mar-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	3-Mar-09	4-Mar-09
PCBs, total	SW846 8080 - GC-ECD	2-Mar-09	2-Mar-09
Solids, %	Gravimetric, calculation	2-Mar-09	2-Mar-09
VOCs	EPA 8260 - P&T GC-MS	27-Feb-09	2-Mar-09

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW21-S1	MW21-S7	MW22-S1	MW22-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09
	Sample ID:	0909192-01	0909192-02	0909192-03	0909192-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	92.8	82.2	92.1	72.5
Metals					
Antimony	1 ug/g dry	3	<1	<1	<1
Arsenic	1 ug/g dry	3	4	4	3
Barium	10 ug/g dry	83	166	190	191
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	0.6
Boron, available	0.5 ug/g dry	<0.5	0.7	<0.5	0.6
Cadmium	0.5 ug/g dry	<0.5	<0.5	0.5	<0.5
Chromium	5 ug/g dry	16	25	20	26
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	5	7	6	8
Copper	5 ug/g dry	25	50	57	19
Lead	1 ug/g dry	66	142	144	48
Mercury	0.1 ug/g dry	0.1	0.3	0.3	0.1
Molybdenum	1 ug/g dry	2	<1	1	<1
Nickel	5 ug/g dry	13	18	24	22
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	22	21	22	18
Zinc	20 ug/g dry	46	87	121	43
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW21-S1	MW21-S7	MW22-S1	MW22-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09
	Sample ID:	0909192-01	0909192-02	0909192-03	0909192-04
	MDL/Units	Soil	Soil	Soil	Soil
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	0.020	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	0.010	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	0.015	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Dibromofluoromethane	Surrogate	87.9%	87.9%	89.4%	84.3%
Toluene-d8	Surrogate	99.0%	95.7%	99.4%	97.0%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	44

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW21-S1	MW21-S7	MW22-S1	MW22-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	25-Feb-09
	Sample ID:	0909192-01	0909192-02	0909192-03	0909192-04
	MDL/Units	Soil	Soil	Soil	Soil
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	1350
F3 PHCs (C16-C34)	10 ug/g dry	<10	<10	93	237
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	104	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.05	0.17	0.11	0.37
Acenaphthylene	0.02 ug/g dry	0.12	0.30	0.30	0.10
Anthracene	0.02 ug/g dry	0.23	0.73	0.52	0.04
Benzo[a]anthracene	0.02 ug/g dry	0.53	1.15	1.19	0.10
Benzo[a]pyrene	0.02 ug/g dry	0.46	0.94	1.06	0.08
Benzo[b]fluoranthene	0.02 ug/g dry	0.76	1.73	1.77	0.12
Benzo[g,h,i]perylene	0.02 ug/g dry	0.31	0.60	0.66	0.05
Benzo[k]fluoranthene	0.02 ug/g dry	0.42	0.93	0.73	0.07
Biphenyl	0.02 ug/g dry	0.02	0.07	0.04	<0.02
Chrysene	0.02 ug/g dry	0.60	1.20	1.32	0.10
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.08	0.14	0.14	<0.02
Fluoranthene	0.02 ug/g dry	0.91	1.87	1.79	0.17
Fluorene	0.02 ug/g dry	0.07	0.24	0.15	0.75
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.27	0.57	0.62	0.04
1-Methylnaphthalene	0.02 ug/g dry	0.09	0.17	0.17	7.50
2-Methylnaphthalene	0.02 ug/g dry	0.10	0.31	0.23	8.60
Naphthalene	0.02 ug/g dry	0.08	0.26	0.20	4.47
Phenanthrene	0.02 ug/g dry	0.67	1.79	1.40	0.43
Pyrene	0.02 ug/g dry	0.83	1.64	1.66	0.16
2-Fluorobiphenyl	Surrogate	109%	91.5%	117%	118%
Terphenyl-d14	Surrogate	94.6%	117%	102%	106%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	68.4%	70.7%	74.3%	99.2%

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW24-S1	MW24-S3	MW25-S1	MW25-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	26-Feb-09
	Sample ID:	0909192-05	0909192-06	0909192-07	0909192-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	94.0	80.2	93.5	71.7
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	2	6	2	3
Barium	10 ug/g dry	99	161	116	197
Beryllium	0.5 ug/g dry	<0.5	0.5	<0.5	0.6
Boron, available	0.5 ug/g dry	<0.5	0.5	<0.5	0.7
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	16	30	19	31
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	5	9	5	7
Copper	5 ug/g dry	17	44	26	94
Lead	1 ug/g dry	43	89	55	118
Mercury	0.1 ug/g dry	<0.1	0.1	<0.1	0.3
Molybdenum	1 ug/g dry	<1	1	<1	<1
Nickel	5 ug/g dry	14	23	15	20
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	24	35	22	25
Zinc	20 ug/g dry	35	83	53	114
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW24-S1	MW24-S3	MW25-S1	MW25-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	26-Feb-09
	Sample ID:	0909192-05	0909192-06	0909192-07	0909192-08
	MDL/Units	Soil	Soil	Soil	Soil
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	<0.010	<0.010
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Dibromofluoromethane	Surrogate	89.3%	87.9%	89.1%	88.9%
Toluene-d8	Surrogate	100%	102%	101%	96.9%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	122

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW24-S1	MW24-S3	MW25-S1	MW25-S6
	Sample Date:	25-Feb-09	25-Feb-09	25-Feb-09	26-Feb-09
	Sample ID:	0909192-05	0909192-06	0909192-07	0909192-08
	MDL/Units	Soil	Soil	Soil	Soil
F3 PHCs (C16-C34)	10 ug/g dry	119	<10	<10	31
F4 PHCs (C34-C50)	10 ug/g dry	289	<10	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.22	0.07	0.09	0.03
Acenaphthylene	0.02 ug/g dry	0.16	0.10	0.12	0.03
Anthracene	0.02 ug/g dry	0.78	0.27	0.42	0.04
Benzo[a]anthracene	0.02 ug/g dry	1.37	0.57	0.94	0.09
Benzo[a]pyrene	0.02 ug/g dry	1.11	0.48	0.69	0.07
Benzo[b]fluoranthene	0.02 ug/g dry	1.89	0.79	1.13	0.11
Benzo[g,h,i]perylene	0.02 ug/g dry	0.60	0.27	0.37	0.04
Benzo[k]fluoranthene	0.02 ug/g dry	1.08	0.37	0.57	0.06
Biphenyl	0.02 ug/g dry	0.04	0.02	0.02	0.03
Chrysene	0.02 ug/g dry	1.47	0.63	0.98	0.10
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.18	0.08	0.09	<0.02
Fluoranthene	0.02 ug/g dry	2.45	1.00	1.64	0.16
Fluorene	0.02 ug/g dry	0.32	0.09	0.14	0.08
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.57	0.26	0.37	0.04
1-Methylnaphthalene	0.02 ug/g dry	0.11	0.06	0.06	0.59
2-Methylnaphthalene	0.02 ug/g dry	0.13	0.08	0.07	0.25
Naphthalene	0.02 ug/g dry	0.23	0.10	0.10	0.15
Phenanthrene	0.02 ug/g dry	2.25	0.82	1.37	0.14
Pyrene	0.02 ug/g dry	2.11	0.89	1.39	0.15
2-Fluorobiphenyl	Surrogate	140%	118%	118%	107%
Terphenyl-d14	Surrogate	123%	106%	107%	98.9%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	80.9%	68.9%	75.7%	65.3%

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW23-S1	MW23-S6	-	-
	Sample Date:	26-Feb-09	26-Feb-09	-	-
	Sample ID:	0909192-09	0909192-10	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	90.9	75.2	-	-
Metals					
Antimony	1 ug/g dry	<1	<1	-	-
Arsenic	1 ug/g dry	3	4	-	-
Barium	10 ug/g dry	149	145	-	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	-	-
Boron, available	0.5 ug/g dry	0.6	0.7	-	-
Cadmium	0.5 ug/g dry	0.7	<0.5	-	-
Chromium	5 ug/g dry	23	18	-	-
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	-	-
Cobalt	5 ug/g dry	6	5	-	-
Copper	5 ug/g dry	44	106	-	-
Lead	1 ug/g dry	112	47	-	-
Mercury	0.1 ug/g dry	0.2	0.1	-	-
Molybdenum	1 ug/g dry	<1	<1	-	-
Nickel	5 ug/g dry	18	15	-	-
Selenium	1 ug/g dry	<1	<1	-	-
Silver	0.3 ug/g dry	<0.3	1.5	-	-
Thallium	1 ug/g dry	<1	<1	-	-
Vanadium	10 ug/g dry	24	12	-	-
Zinc	20 ug/g dry	88	51	-	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	-	-
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	-	-
Bromoform	0.002 ug/g dry	<0.002	<0.002	-	-
Bromomethane	0.003 ug/g dry	<0.003	<0.003	-	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	-	-
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
Chloroethane	0.005 ug/g dry	<0.005	<0.005	-	-
Chloroform	0.003 ug/g dry	<0.003	<0.003	-	-
Chloromethane	0.020 ug/g dry	<0.020	<0.020	-	-
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	-	-

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW23-S1	MW23-S6	-	-
	Sample Date:	26-Feb-09	26-Feb-09	-	-
	Sample ID:	0909192-09	0909192-10	-	-
	MDL/Units	Soil	Soil	-	-
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	-	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	-	-
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	-	-
Methylene Chloride	0.010 ug/g dry	<0.010	<0.010	-	-
Styrene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	-	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	-	-
Toluene	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	-	-
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	-	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	-	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	-	-
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	-	-
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	-	-
o-Xylene	0.002 ug/g dry	<0.002	<0.002	-	-
Dibromofluoromethane	Surrogate	88.5%	88.8%	-	-
Toluene-d8	Surrogate	100%	101%	-	-
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	-	-
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	-	-

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW23-S1	MW23-S6	-	-
	Sample Date:	26-Feb-09	26-Feb-09	-	-
	Sample ID:	0909192-09	0909192-10	-	-
	MDL/Units	Soil	Soil	-	-
F3 PHCs (C16-C34)	10 ug/g dry	81	<10	-	-
F4 PHCs (C34-C50)	10 ug/g dry	86	<10	-	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.60	<0.02	-	-
Acenaphthylene	0.02 ug/g dry	0.25	0.04	-	-
Anthracene	0.02 ug/g dry	1.21	0.07	-	-
Benzo[a]anthracene	0.02 ug/g dry	1.84	0.17	-	-
Benzo[a]pyrene	0.02 ug/g dry	1.49	0.15	-	-
Benzo[b]fluoranthene	0.02 ug/g dry	2.26	0.23	-	-
Benzo[g,h,i]perylene	0.02 ug/g dry	0.75	0.08	-	-
Benzo[k]fluoranthene	0.02 ug/g dry	1.10	0.13	-	-
Biphenyl	0.02 ug/g dry	0.12	<0.02	-	-
Chrysene	0.02 ug/g dry	1.91	0.18	-	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.20	<0.02	-	-
Fluoranthene	0.02 ug/g dry	3.13	0.25	-	-
Fluorene	0.02 ug/g dry	0.62	0.02	-	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.73	0.06	-	-
1-Methylnaphthalene	0.02 ug/g dry	0.30	0.02	-	-
2-Methylnaphthalene	0.02 ug/g dry	0.42	0.02	-	-
Naphthalene	0.02 ug/g dry	0.69	0.02	-	-
Phenanthrene	0.02 ug/g dry	3.66	0.16	-	-
Pyrene	0.02 ug/g dry	2.77	0.23	-	-
2-Fluorobiphenyl	Surrogate	123%	116%	-	-
Terphenyl-d14	Surrogate	110%	110%	-	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	-	-
Decachlorobiphenyl	Surrogate	75.4%	94.1%	-	-

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.0923*		*ug/g*		*92.3*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*1.51*	*0.01*	*ug/g*		*113*	*32-156*			
Surrogate: Terphenyl-d14	*1.39*	*0.01*	*ug/g*		*104*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g						
Bromodichloromethane	ND	0.002	ug/g						

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.010	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: Dibromofluoromethane	*0.142*		*ug/g*		*104*	*78-124*			
Surrogate: Toluene-d8	*0.137*		*ug/g*		*101*	*76-118*			

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g dry	ND				32	
F2 PHCs (C10-C16)	ND	10	ug/g dry	ND				50	
F3 PHCs (C16-C34)	ND	10	ug/g dry	ND				50	
F4 PHCs (C34-C50)	ND	10	ug/g dry	ND				50	
Metals									
Antimony	1.4	1	ug/g dry	3.0			71.9	26	QR-01
Arsenic	2.5	1	ug/g dry	2.5			0.2	35	
Barium	88.1	10	ug/g dry	83.1			5.9	34	
Beryllium	ND	0.5	ug/g dry	ND				25	
Boron, available	ND	0.5	ug/g dry	ND				35	
Cadmium	ND	0.5	ug/g dry	ND				33	
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	16.9	5	ug/g dry	16.4			3.4	32	
Cobalt	ND	5	ug/g dry	ND				32	
Copper	25.8	5	ug/g dry	25.1			2.8	32	
Lead	68.8	1	ug/g dry	65.7			4.5	44	
Mercury	0.127	0.1	ug/g dry	ND				35	QR-01
Molybdenum	1.6	1	ug/g dry	2.0			18.8	29	
Nickel	13.9	5	ug/g dry	13.5			3.3	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	23.2	10	ug/g dry	22.1			4.8	27	
Zinc	47.3	20	ug/g dry	45.9			2.8	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.0850*		*ug/g dry*	*ND*	*78.9*	*40-147*			
Physical Characteristics									
% Solids	90.5	0.1	% by Wt.	92.8			2.5	25	
Semi-Volatiles									
Acenaphthene	0.056	0.02	ug/g dry	0.053			4.9	50	
Acenaphthylene	0.124	0.02	ug/g dry	0.116			6.1	50	
Anthracene	0.245	0.02	ug/g dry	0.230			6.3	50	
Benzo[a]anthracene	0.550	0.02	ug/g dry	0.531			3.7	50	
Benzo[a]pyrene	0.482	0.02	ug/g dry	0.458			5.0	50	
Benzo[b]fluoranthene	0.781	0.02	ug/g dry	0.764			2.2	50	
Benzo[g,h,i]perylene	0.316	0.02	ug/g dry	0.309			2.2	50	
Benzo[k]fluoranthene	0.399	0.02	ug/g dry	0.416			4.0	50	
Biphenyl	0.023	0.02	ug/g dry	ND				50	QR-01
Chrysene	0.613	0.02	ug/g dry	0.604			1.5	50	
Dibenzo[a,h]anthracene	0.081	0.02	ug/g dry	0.076			5.5	50	
Fluoranthene	0.968	0.02	ug/g dry	0.914			5.7	50	
Fluorene	0.073	0.02	ug/g dry	0.068			6.4	50	
Indeno[1,2,3-cd]pyrene	0.292	0.02	ug/g dry	0.271			7.7	50	
1-Methylnaphthalene	0.091	0.02	ug/g dry	0.091			0.0	50	
2-Methylnaphthalene	0.104	0.02	ug/g dry	0.098			5.4	50	
Naphthalene	0.087	0.02	ug/g dry	0.085			2.4	50	
Phenanthrene	0.707	0.02	ug/g dry	0.667			5.9	50	
Pyrene	0.868	0.02	ug/g dry	0.825			5.1	50	
Surrogate: 2-Fluorobiphenyl	*1.60*	*0.01*	*ug/g dry*	*ND*	*111*	*32-156*			
Surrogate: Terphenyl-d14	*1.38*	*0.01*	*ug/g dry*	*ND*	*95.9*	*39-146*			

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	ND	0.002	ug/g dry	0.0033			200.0	50	QR-01
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	0.0033	0.002	ug/g dry	0.0028			16.5	34	
Methylene Chloride	ND	0.010	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	0.0126	0.002	ug/g dry	0.0104			19.4	35	
o-Xylene	0.0122	0.002	ug/g dry	0.0092			27.4	50	
Surrogate: Dibromofluoromethane	*0.124*		*ug/g dry*	*ND*	*83.1*	*78-124*			
Surrogate: Toluene-d8	*0.143*		*ug/g dry*	*ND*	*95.7*	*76-118*			

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	98	10	ug/g	ND	97.6	80-120			
F2 PHCs (C10-C16)	91	10	ug/g	ND	114	61-129			
F3 PHCs (C16-C34)	244	10	ug/g	ND	122	61-129			
F4 PHCs (C34-C50)	149	10	ug/g	ND	124	61-129			
Metals									
Antimony	40.8		ug/L	1.2	79.1	78-126			
Arsenic	44.9		ug/L	1.0	87.9	80-120			
Barium	85.1		ug/L	33.2	104	83-116			
Beryllium	49.3		ug/L	0.12	98.4	72-123			
Boron, available	3.85	0.5	ug/g	ND	76.9	70-122			
Cadmium	43.7		ug/L	0.10	87.3	78-118			
Chromium (VI)	4.9	0.4	ug/g	ND	98.0	89-123			
Chromium	54.0		ug/L	6.5	94.8	80-124			
Cobalt	47.6		ug/L	1.9	91.4	78-125			
Copper	55.5		ug/L	10.0	90.9	75-123			
Lead	75.8		ug/L	26.3	99.1	80-120			
Mercury	1.72	0.1	ug/g	ND	115	72-128			
Molybdenum	44.3		ug/L	0.8	87.0	82-119			
Nickel	51.0		ug/L	5.4	91.1	78-119			
Selenium	45.4		ug/L	0.2	90.4	81-125			
Silver	43.5		ug/L	0.09	86.8	70-128			
Thallium	49.4		ug/L	0.05	98.7	82-127			
Vanadium	57.9		ug/L	8.8	98.1	82-123			
Zinc	61.0		ug/L	18.4	85.3	78-130			
PCBs									
PCBs, total	0.440	0.05	ug/g	ND	110	58-147			
Surrogate: Decachlorobiphenyl	*0.0996*		*ug/g*		*99.6*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.155	0.02	ug/g	ND	93.2	31-121			
Acenaphthylene	0.153	0.02	ug/g	ND	91.6	26-124			
Anthracene	0.183	0.02	ug/g	ND	110	29-128			
Benzo[a]anthracene	0.161	0.02	ug/g	ND	96.7	29-129			
Benzo[a]pyrene	0.174	0.02	ug/g	ND	105	29-111			
Benzo[b]fluoranthene	0.159	0.02	ug/g	ND	95.1	26-111			
Benzo[g,h,i]perylene	0.141	0.02	ug/g	ND	84.7	23-128			
Benzo[k]fluoranthene	0.180	0.02	ug/g	ND	108	23-135			
Biphenyl	0.158	0.02	ug/g	ND	94.6	31-107			
Chrysene	0.173	0.02	ug/g	ND	104	28-136			
Dibenzo[a,h]anthracene	0.120	0.02	ug/g	ND	72.0	20-131			
Fluoranthene	0.161	0.02	ug/g	ND	96.4	24-131			
Fluorene	0.173	0.02	ug/g	ND	104	28-123			
Indeno[1,2,3-cd]pyrene	0.125	0.02	ug/g	ND	75.1	20-128			
1-Methylnaphthalene	0.129	0.02	ug/g	ND	77.6	24-127			
2-Methylnaphthalene	0.131	0.02	ug/g	ND	78.5	21-127			
Naphthalene	0.125	0.02	ug/g	ND	75.2	29-118			
Phenanthrene	0.170	0.02	ug/g	ND	102	34-108			
Pyrene	0.172	0.02	ug/g	ND	103	29-131			
Surrogate: 2-Fluorobiphenyl	*1.57*	0.01	*ug/g*		*118*	*32-156*			
Surrogate: Terphenyl-d14	*1.31*	0.01	*ug/g*		*98.5*	*39-146*			
Volatiles									
Benzene	0.0481	0.002	ug/g	ND	70.8	55-141			
Bromodichloromethane	0.0479	0.002	ug/g	ND	70.4	52-139			

PARACEL LABORATORIES LTD.

Order #: 0909192

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromoform	0.0604	0.002	ug/g	ND	88.9	52-170			
Bromomethane	0.0563	0.003	ug/g	ND	82.8	32-138			
Carbon Tetrachloride	0.0434	0.002	ug/g	ND	63.9	49-149			
Chlorobenzene	0.0774	0.002	ug/g	ND	114	64-137			
Chloroethane	0.0560	0.005	ug/g	ND	82.4	39-152			
Chloroform	0.0507	0.003	ug/g	ND	74.6	58-138			
Chloromethane	0.0609	0.020	ug/g	ND	89.5	24-163			
Dibromochloromethane	0.0713	0.002	ug/g	ND	105	61-153			
1,2-Dibromoethane	0.0631	0.002	ug/g	ND	92.9	61-145			
1,2-Dichlorobenzene	0.0579	0.002	ug/g	ND	85.2	60-150			
1,3-Dichlorobenzene	0.0637	0.002	ug/g	ND	93.7	62-149			
1,4-Dichlorobenzene	0.0775	0.002	ug/g	ND	114	63-132			
1,1-Dichloroethane	0.0457	0.002	ug/g	ND	67.2	51-156			
1,2-Dichloroethane	0.0570	0.002	ug/g	ND	83.8	50-140			
1,1-Dichloroethylene	0.0546	0.002	ug/g	ND	80.3	43-153			
cis-1,2-Dichloroethylene	0.0623	0.002	ug/g	ND	91.6	58-145			
trans-1,2-Dichloroethylene	0.0707	0.003	ug/g	ND	104	51-145			
1,2-Dichloropropane	0.0512	0.002	ug/g	ND	75.4	56-136			
cis-1,3-Dichloropropylene	0.0642	0.002	ug/g	ND	94.3	54-141			
trans-1,3-Dichloropropylene	0.0829	0.002	ug/g	ND	122	61-140			
Ethylbenzene	0.0700	0.002	ug/g	ND	103	61-139			
Methylene Chloride	0.0481	0.010	ug/g	ND	70.8	58-149			
Styrene	0.0614	0.002	ug/g	ND	90.3	63-143			
1,1,1,2-Tetrachloroethane	0.0765	0.003	ug/g	ND	112	61-148			
1,1,2,2-Tetrachloroethane	0.0708	0.003	ug/g	ND	104	50-157			
Tetrachloroethylene	0.0515	0.002	ug/g	ND	75.7	51-145			
Toluene	0.0461	0.002	ug/g	ND	67.7	54-136			
1,1,1-Trichloroethane	0.0472	0.002	ug/g	ND	69.4	55-140			
1,1,2-Trichloroethane	0.0654	0.002	ug/g	ND	96.1	63-144			
Trichloroethylene	0.0455	0.003	ug/g	ND	66.8	52-135			
Trichlorofluoromethane	0.0523	0.005	ug/g	ND	76.9	37-155			
1,3,5-Trimethylbenzene	0.0700	0.003	ug/g	ND	103	61-151			
Vinyl chloride	0.0599	0.002	ug/g	ND	88.2	31-159			
m,p-Xylenes	0.143	0.002	ug/g	ND	105	61-139			
o-Xylene	0.0687	0.002	ug/g	ND	101	60-142			
Surrogate: 4-Bromofluorobenzene	*0.129*		*ug/g*		*94.7*	*83-134*			
Surrogate: Dibromofluoromethane	*0.121*		*ug/g*		*88.7*	*78-124*			
Surrogate: Toluene-d8	*0.146*		*ug/g*		*107*	*76-118*			

Certificate of Analysis

Report Date: 05-Mar-2009
Order Date:27-Feb-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Chain of Custody Record
№ 55424
Pg. 1 of 1

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade Rd
Tel: 613-225-9940 Cell:
Email: mark.mccalla@trow.com

Project Ref: OTEN000019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0909192	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	Metals	PAH	PCB									Hazardous? (Y/N)
1	MW21-S1	S		1	Feb 25/09	x	x	x	x	x									
2	MW21-S7	↓		↓	↓	↓	↓	↓	↓	↓									
3	MW22-S1	↓		↓	↓	↓	↓	↓	↓	↓									
4	MW22-S6	↓		↓	↓	↓	↓	↓	↓	↓									
5	MW24-S1	↓		↓	↓	↓	↓	↓	↓	↓									
6	MW24-S3	↓		↓	↓	↓	↓	↓	↓	↓									
7	MW25-S1	↓		↓	↓	↓	↓	↓	↓	↓									
8	MW25-S6	↓		↓	↓	↓	↓	↓	↓	↓									
9	MW23-S1	↓		↓	Feb 26/09	↓	↓	↓	↓	↓									
10	MW23-S6	↓		↓	↓	↓	↓	↓	↓	↓									

Comments: * Cooler left @ reception late evening Feb 26, 2009. Paracel to pick up ~ 8:30am Feb 27, 2009.

Relinquished By: Colin Brown Date: Time:	Received at Depot: Date: Time:	Received at Lab: Date: Feb. 27/09 Time: 10:00	Verified By: Date: Time:

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements. Paracel -

WHITE - Lab Copy, PINK - Client Copy

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 59673,59674,59675

Report Date: 27-May-2009
Order Date: 19-May-2009
Order #: 0921032

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0921032-01	SS1
0921032-02	SS2
0921032-03	SS3
0921032-04	SS4
0921032-05	SS5
0921032-06	SS6
0921032-07	SS7
0921032-08	SS8
0921032-09	SS9
0921032-10	SS10
0921032-11	SS11
0921032-12	SS12
0921032-13	SS13
0921032-14	SS14
0921032-15	SS15
0921032-16	SS16
0921032-17	SS17
0921032-18	SS18
0921032-19	SS19
0921032-20	SS20
0921032-21	SS21
0921032-22	SS22
0921032-23	SS23
0921032-24	SS24
0921032-25	SS25
0921032-26	SS70
0921032-27	SS80

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	26-May-09	26-May-09
CCME PHC F1	CWS Tier 1 - P&T GC-FID	22-May-09	23-May-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	22-May-09	25-May-09
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	27-May-09	27-May-09
Mercury	EPA 7471A - CVAA, digestion	25-May-09	25-May-09
Metals	EPA 6020 - Digestion - ICP-MS	22-May-09	25-May-09
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	24-May-09	25-May-09
PCBs, total	SW846 8080 - GC-ECD	22-May-09	23-May-09
Solids, %	Gravimetric, calculation	22-May-09	22-May-09
VOCs	EPA 8260 - P&T GC-MS	22-May-09	25-May-09

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS1	SS2	SS3	SS4
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-01	0921032-02	0921032-03	0921032-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	81.8	79.9	87.1	67.2
Metals					
Antimony	1 ug/g dry	<1	1	<1	<1
Arsenic	1 ug/g dry	1	1	1	<1
Barium	10 ug/g dry	96	70	32	35
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	0.7	<0.5	1.4
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	18	16	9	10
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	<5	<5	<5
Copper	5 ug/g dry	10	11	7	9
Lead	1 ug/g dry	19	25	16	5
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	<1	<1	<1
Nickel	5 ug/g dry	9	9	6	6
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	31	28	20	18
Zinc	20 ug/g dry	48	52	26	<20
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS1	SS2	SS3	SS4
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-01	0921032-02	0921032-03	0921032-04
	MDL/Units	Soil	Soil	Soil	Soil
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	92.3%	91.9%	94.1%	91.9%
Dibromofluoromethane	Surrogate	107%	108%	110%	108%
Toluene-d8	Surrogate	116%	116%	117%	117%

Hydrocarbons

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS1	SS2	SS3	SS4
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-01	0921032-02	0921032-03	0921032-04
	MDL/Units	Soil	Soil	Soil	Soil
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	18	21	<10	125
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	36
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	0.02 ug/g dry	<0.02	0.03	<0.02	0.04
Anthracene	0.02 ug/g dry	<0.02	0.06	0.03	0.20
Benzo[a]anthracene	0.02 ug/g dry	0.03	0.10	0.03	0.10
Benzo[a]pyrene	0.02 ug/g dry	0.02	0.09	0.03	0.09
Benzo[b]fluoranthene	0.02 ug/g dry	0.04	0.20	0.09	0.24
Benzo[g,h,i]perylene	0.02 ug/g dry	0.02	0.07	0.04	0.09
Benzo[k]fluoranthene	0.02 ug/g dry	0.02	0.09	0.05	0.10
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.03	0.21	0.07	0.27
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.02
Fluoranthene	0.02 ug/g dry	0.06	0.26	0.08	0.21
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	0.05	0.03	0.07
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Naphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Phenanthrene	0.02 ug/g dry	0.03	0.09	0.03	0.11
Pyrene	0.02 ug/g dry	0.05	0.23	0.07	0.19
2-Fluorobiphenyl	Surrogate	58.8%	75.1%	93.2%	57.6%
Terphenyl-d14	Surrogate	57.0%	75.6%	99.4%	59.8%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	46.0%	86.2%	132%	85.0%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS5	SS6	SS7	SS8
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-05	0921032-06	0921032-07	0921032-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	81.6	79.1	76.5	78.1
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	1	<1	1	1
Barium	10 ug/g dry	77	102	93	102
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	1.0	0.5	0.5	0.7
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	14	18	22	23
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	<5	<5	<5
Copper	5 ug/g dry	9	7	14	14
Lead	1 ug/g dry	23	10	19	8
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	1	1	1
Nickel	5 ug/g dry	7	7	11	11
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	26	27	29	30
Zinc	20 ug/g dry	42	24	33	30
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS5	SS6	SS7	SS8
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-05	0921032-06	0921032-07	0921032-08
	MDL/Units	Soil	Soil	Soil	Soil
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	91.8%	89.2%	91.3%	92.3%
Dibromofluoromethane	Surrogate	106%	105%	105%	105%
Toluene-d8	Surrogate	116%	116%	115%	117%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS5	SS6	SS7	SS8
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-05	0921032-06	0921032-07	0921032-08
	MDL/Units	Soil	Soil	Soil	Soil
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	26	<10	<10	<10
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	0.02 ug/g dry	0.03	<0.02	0.02	<0.02
Anthracene	0.02 ug/g dry	0.06	0.05	0.06	<0.02
Benzo[a]anthracene	0.02 ug/g dry	0.12	0.02	0.13	<0.02
Benzo[a]pyrene	0.02 ug/g dry	0.11	0.03	0.11	<0.02
Benzo[b]fluoranthene	0.02 ug/g dry	0.16	0.05	0.16	<0.02
Benzo[g,h,i]perylene	0.02 ug/g dry	0.08	0.02	0.07	<0.02
Benzo[k]fluoranthene	0.02 ug/g dry	0.09	0.02	0.08	<0.02
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.13	0.04	0.13	<0.02
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.02	<0.02	0.02	<0.02
Fluoranthene	0.02 ug/g dry	0.25	0.07	0.26	0.02
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.07	0.02	0.06	<0.02
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Naphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Phenanthrene	0.02 ug/g dry	0.14	0.04	0.15	<0.02
Pyrene	0.02 ug/g dry	0.22	0.07	0.22	0.02
2-Fluorobiphenyl	Surrogate	69.5%	60.5%	69.7%	79.3%
Terphenyl-d14	Surrogate	69.7%	61.1%	69.3%	82.3%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	76.0%	84.0%	96.0%	79.0%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS9	SS10	SS11	SS12
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-09	0921032-10	0921032-11	0921032-12
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	78.1	81.1	79.7	79.1
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	1	1	<1	1
Barium	10 ug/g dry	105	97	88	106
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	0.6	0.5	0.6	0.7
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	22	21	21	23
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	5	<5	<5	<5
Copper	5 ug/g dry	17	11	12	13
Lead	1 ug/g dry	22	16	15	14
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	1	<1	<1
Nickel	5 ug/g dry	11	10	9	11
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	30	29	27	28
Zinc	20 ug/g dry	39	30	31	34
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS9	SS10	SS11	SS12
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-09	0921032-10	0921032-11	0921032-12
	MDL/Units	Soil	Soil	Soil	Soil
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	92.4%	91.6%	91.9%	92.2%
Dibromofluoromethane	Surrogate	108%	106%	103%	106%
Toluene-d8	Surrogate	117%	116%	116%	115%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS9	SS10	SS11	SS12
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-09	0921032-10	0921032-11	0921032-12
	MDL/Units	Soil	Soil	Soil	Soil
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	34	<10	32	<10
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	0.02	<0.02	0.02	<0.02
Acenaphthylene	0.02 ug/g dry	0.04	<0.02	0.03	0.02
Anthracene	0.02 ug/g dry	0.11	0.03	0.06	0.03
Benzo[a]anthracene	0.02 ug/g dry	0.25	0.08	0.12	0.07
Benzo[a]pyrene	0.02 ug/g dry	0.22	0.07	0.10	0.06
Benzo[b]fluoranthene	0.02 ug/g dry	0.29	0.10	0.14	0.09
Benzo[g,h,i]perylene	0.02 ug/g dry	0.13	0.04	0.06	0.04
Benzo[k]fluoranthene	0.02 ug/g dry	0.15	0.05	0.06	0.04
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.26	0.08	0.13	0.07
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.03	<0.02	0.02	<0.02
Fluoranthene	0.02 ug/g dry	0.53	0.17	0.25	0.15
Fluorene	0.02 ug/g dry	0.03	<0.02	0.02	<0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.12	0.04	0.06	0.03
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	0.02	<0.02	<0.02	<0.02
Naphthalene	0.02 ug/g dry	0.02	<0.02	0.02	<0.02
Phenanthrene	0.02 ug/g dry	0.29	0.10	0.17	0.09
Pyrene	0.02 ug/g dry	0.45	0.14	0.22	0.12
2-Fluorobiphenyl	Surrogate	70.2%	71.2%	62.8%	65.4%
Terphenyl-d14	Surrogate	75.3%	73.1%	65.4%	62.9%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	72.0%	93.3%	115%	124%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS13	SS14	SS15	SS16
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-13	0921032-14	0921032-15	0921032-16
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	81.5	79.2	83.9	76.1
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	<1	<1	1	1
Barium	10 ug/g dry	103	87	65	57
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	0.5	0.5	0.6	1.1
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	23	19	12	12
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	<5	<5	<5
Copper	5 ug/g dry	11	9	13	13
Lead	1 ug/g dry	13	12	35	51
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	<1	<1	<1	<1
Nickel	5 ug/g dry	10	9	11	7
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	31	28	18	23
Zinc	20 ug/g dry	30	29	60	61
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS13	SS14	SS15	SS16
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-13	0921032-14	0921032-15	0921032-16
	MDL/Units	Soil	Soil	Soil	Soil
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	92.8%	94.0%	93.8%	94.7%
Dibromofluoromethane	Surrogate	105%	105%	105%	106%
Toluene-d8	Surrogate	116%	116%	117%	117%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS13	SS14	SS15	SS16
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-13	0921032-14	0921032-15	0921032-16
	MDL/Units	Soil	Soil	Soil	Soil
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	<10	<10	26	44
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	0.02	<0.02
Acenaphthylene	0.02 ug/g dry	0.02	<0.02	0.04	<0.02
Anthracene	0.02 ug/g dry	0.03	0.03	0.08	<0.02
Benzo[a]anthracene	0.02 ug/g dry	0.06	0.06	0.17	0.02
Benzo[a]pyrene	0.02 ug/g dry	0.05	0.05	0.14	0.02
Benzo[b]fluoranthene	0.02 ug/g dry	0.07	0.08	0.21	0.04
Benzo[g,h,i]perylene	0.02 ug/g dry	0.03	0.03	0.09	0.02
Benzo[k]fluoranthene	0.02 ug/g dry	0.04	0.03	0.08	<0.02
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.06	0.06	0.18	0.03
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	<0.02	0.03	<0.02
Fluoranthene	0.02 ug/g dry	0.11	0.12	0.35	0.05
Fluorene	0.02 ug/g dry	<0.02	<0.02	0.02	<0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.03	0.03	0.08	<0.02
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	0.02	<0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	0.02	<0.02
Naphthalene	0.02 ug/g dry	<0.02	<0.02	0.02	<0.02
Phenanthrene	0.02 ug/g dry	0.07	0.09	0.25	0.03
Pyrene	0.02 ug/g dry	0.10	0.10	0.31	0.04
2-Fluorobiphenyl	Surrogate	67.8%	66.8%	61.6%	46.0%
Terphenyl-d14	Surrogate	68.0%	68.4%	63.0%	44.9%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	106%	86.0%	91.0%	75.0%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS17	SS18	SS19	SS20
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-17	0921032-18	0921032-19	0921032-20
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	82.7	75.4	84.5	86.3
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	2	3	2	4
Barium	10 ug/g dry	71	58	43	54
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	0.5	0.6	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	18	14	12	12
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	5	5	<5	5
Copper	5 ug/g dry	27	23	10	14
Lead	1 ug/g dry	27	10	44	43
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	1	<1	<1	1
Nickel	5 ug/g dry	10	9	8	11
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	27	23	24	20
Zinc	20 ug/g dry	89	56	38	45
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS17	SS18	SS19	SS20
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-17	0921032-18	0921032-19	0921032-20
	MDL/Units	Soil	Soil	Soil	Soil
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	94.8%	93.1%	95.1%	95.1%
Dibromofluoromethane	Surrogate	107%	109%	107%	108%
Toluene-d8	Surrogate	115%	117%	116%	117%

Hydrocarbons

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS17	SS18	SS19	SS20
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-17	0921032-18	0921032-19	0921032-20
	MDL/Units	Soil	Soil	Soil	Soil
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	18	54	73	<10
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	26	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
Acenaphthylene	0.02 ug/g dry	<0.02	<0.02	0.13	0.11
Anthracene	0.02 ug/g dry	<0.02	<0.02	0.31	0.22
Benzo[a]anthracene	0.02 ug/g dry	0.03	<0.02	0.16	0.29
Benzo[a]pyrene	0.02 ug/g dry	0.02	<0.02	0.24	0.29
Benzo[b]fluoranthene	0.02 ug/g dry	0.05	0.02	0.61	0.62
Benzo[g,h,i]perylene	0.02 ug/g dry	0.02	<0.02	0.25	0.22
Benzo[k]fluoranthene	0.02 ug/g dry	0.02	<0.02	0.23	0.31
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.04	<0.02	0.39	0.46
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	<0.02	0.05	0.06
Fluoranthene	0.02 ug/g dry	0.07	0.02	0.24	0.69
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	<0.02	<0.02	0.21	0.20
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.03
Naphthalene	0.02 ug/g dry	<0.02	<0.02	0.02	0.03
Phenanthrene	0.02 ug/g dry	0.03	<0.02	0.09	0.35
Pyrene	0.02 ug/g dry	0.06	0.02	0.21	0.59
2-Fluorobiphenyl	Surrogate	68.0%	65.0%	94.7%	101%
Terphenyl-d14	Surrogate	69.9%	70.4%	97.3%	101%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	87.6%	95.0%	86.0%	112%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS21	SS22	SS23	SS24
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-21	0921032-22	0921032-23	0921032-24
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	77.8	88.9	79.7	79.3
Metals					
Antimony	1 ug/g dry	<1	<1	<1	<1
Arsenic	1 ug/g dry	1	3	<1	1
Barium	10 ug/g dry	86	89	101	94
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Boron, available	0.5 ug/g dry	<0.5	0.7	0.6	0.6
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5 ug/g dry	20	21	21	23
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	<0.4
Cobalt	5 ug/g dry	<5	6	<5	5
Copper	5 ug/g dry	12	15	14	15
Lead	1 ug/g dry	18	26	18	26
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1 ug/g dry	1	2	<1	<1
Nickel	5 ug/g dry	10	14	10	11
Selenium	1 ug/g dry	<1	<1	<1	<1
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1 ug/g dry	<1	<1	<1	<1
Vanadium	10 ug/g dry	27	26	28	30
Zinc	20 ug/g dry	35	36	35	43
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	<0.020
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS21	SS22	SS23	SS24
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-21	0921032-22	0921032-23	0921032-24
	MDL/Units	Soil	Soil	Soil	Soil
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	<0.005
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	<0.003
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	<0.002
4-Bromofluorobenzene	Surrogate	92.5%	96.8%	96.1%	96.6%
Dibromofluoromethane	Surrogate	107%	106%	108%	108%
Toluene-d8	Surrogate	116%	117%	117%	117%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS21	SS22	SS23	SS24
	Sample Date:	19-May-09	19-May-09	19-May-09	19-May-09
	Sample ID:	0921032-21	0921032-22	0921032-23	0921032-24
	MDL/Units	Soil	Soil	Soil	Soil
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	<10
F3 PHCs (C16-C34)	10 ug/g dry	<10	<10	<10	35
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	<10
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.02
Acenaphthylene	0.02 ug/g dry	0.03	0.03	0.03	0.06
Anthracene	0.02 ug/g dry	0.04	0.05	0.05	0.11
Benzo[a]anthracene	0.02 ug/g dry	0.09	0.11	0.11	0.23
Benzo[a]pyrene	0.02 ug/g dry	0.09	0.11	0.10	0.21
Benzo[b]fluoranthene	0.02 ug/g dry	0.13	0.15	0.16	0.31
Benzo[g,h,i]perylene	0.02 ug/g dry	0.06	0.07	0.06	0.12
Benzo[k]fluoranthene	0.02 ug/g dry	0.08	0.08	0.07	0.13
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02 ug/g dry	0.10	0.12	0.11	0.24
Dibenzo[a,h]anthracene	0.02 ug/g dry	0.02	0.02	0.02	0.03
Fluoranthene	0.02 ug/g dry	0.17	0.21	0.20	0.42
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.02
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.05	0.06	0.05	0.11
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.02
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	0.02	0.03
Naphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	0.02
Phenanthrene	0.02 ug/g dry	0.09	0.11	0.11	0.25
Pyrene	0.02 ug/g dry	0.14	0.18	0.17	0.37
2-Fluorobiphenyl	Surrogate	94.5%	104%	96.4%	84.7%
Terphenyl-d14	Surrogate	95.4%	106%	97.9%	88.9%
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	84.0%	96.0%	96.0%	88.0%

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS25	SS70	SS80	-
	Sample Date:	19-May-09	19-May-09	19-May-09	-
	Sample ID:	0921032-25	0921032-26	0921032-27	-
	MDL/Units	Soil	Soil	Soil	-
Physical Characteristics					
% Solids	0.1 % by Wt.	82.7	76.6	77.8	-
Metals					
Antimony	1 ug/g dry	<1	<1	<1	-
Arsenic	1 ug/g dry	<1	1	1	-
Barium	10 ug/g dry	105	92	96	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Boron, available	0.5 ug/g dry	0.6	0.5	0.7	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Chromium	5 ug/g dry	20	21	22	-
Chromium (VI)	0.4 ug/g dry	<0.4	<0.4	<0.4	-
Cobalt	5 ug/g dry	<5	<5	<5	-
Copper	5 ug/g dry	9	13	13	-
Lead	1 ug/g dry	10	18	8	-
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	-
Molybdenum	1 ug/g dry	<1	<1	<1	-
Nickel	5 ug/g dry	9	10	11	-
Selenium	1 ug/g dry	<1	<1	<1	-
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	-
Thallium	1 ug/g dry	<1	<1	<1	-
Vanadium	10 ug/g dry	27	29	29	-
Zinc	20 ug/g dry	30	33	29	-
Volatiles					
Benzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromodichloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromoform	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Bromomethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Carbon Tetrachloride	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Chlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Chloroethane	0.005 ug/g dry	<0.005	<0.005	<0.005	-
Chloroform	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Chloromethane	0.020 ug/g dry	<0.020	<0.020	<0.020	-
Dibromochloromethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS25	SS70	SS80	-
	Sample Date:	19-May-09	19-May-09	19-May-09	-
	Sample ID:	0921032-25	0921032-26	0921032-27	-
	MDL/Units	Soil	Soil	Soil	-
1,2-Dibromoethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,2-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,3-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,4-Dichlorobenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,2-Dichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
cis-1,2-Dichloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
trans-1,2-Dichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
1,2-Dichloropropane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
cis-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
trans-1,3-Dichloropropylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Ethylbenzene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Methylene Chloride	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Styrene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,1,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
1,1,2,2-Tetrachloroethane	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Tetrachloroethylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Toluene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,1-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
1,1,2-Trichloroethane	0.002 ug/g dry	<0.002	<0.002	<0.002	-
Trichloroethylene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Trichlorofluoromethane	0.005 ug/g dry	<0.005	<0.005	<0.005	-
1,3,5-Trimethylbenzene	0.003 ug/g dry	<0.003	<0.003	<0.003	-
Vinyl chloride	0.002 ug/g dry	<0.002	<0.002	<0.002	-
m,p-Xylenes	0.002 ug/g dry	<0.002	<0.002	<0.002	-
o-Xylene	0.002 ug/g dry	<0.002	<0.002	<0.002	-
4-Bromofluorobenzene	Surrogate	94.4%	94.5%	93.4%	-
Dibromofluoromethane	Surrogate	107%	107%	107%	-
Toluene-d8	Surrogate	116%	116%	117%	-
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	-
F2 PHCs (C10-C16)	10 ug/g dry	<10	<10	<10	-

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	SS25	SS70	SS80	-
	Sample Date:	19-May-09	19-May-09	19-May-09	-
	Sample ID:	0921032-25	0921032-26	0921032-27	-
	MDL/Units	Soil	Soil	Soil	-
F3 PHCs (C16-C34)	10 ug/g dry	18	<10	<10	-
F4 PHCs (C34-C50)	10 ug/g dry	<10	<10	<10	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	0.03	<0.02	-
Acenaphthylene	0.02 ug/g dry	<0.02	0.03	<0.02	-
Anthracene	0.02 ug/g dry	<0.02	0.09	<0.02	-
Benzo[a]anthracene	0.02 ug/g dry	0.04	0.24	<0.02	-
Benzo[a]pyrene	0.02 ug/g dry	0.03	0.18	<0.02	-
Benzo[b]fluoranthene	0.02 ug/g dry	0.05	0.28	0.02	-
Benzo[g,h,i]perylene	0.02 ug/g dry	0.02	0.10	<0.02	-
Benzo[k]fluoranthene	0.02 ug/g dry	0.03	0.13	<0.02	-
Biphenyl	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Chrysene	0.02 ug/g dry	0.04	0.21	<0.02	-
Dibenzo[a,h]anthracene	0.02 ug/g dry	<0.02	0.04	<0.02	-
Fluoranthene	0.02 ug/g dry	0.07	0.42	0.02	-
Fluorene	0.02 ug/g dry	<0.02	0.03	<0.02	-
Indeno[1,2,3-cd]pyrene	0.02 ug/g dry	0.02	0.09	<0.02	-
1-Methylnaphthalene	0.02 ug/g dry	<0.02	0.04	<0.02	-
2-Methylnaphthalene	0.02 ug/g dry	<0.02	0.06	<0.02	-
Naphthalene	0.02 ug/g dry	<0.02	0.06	<0.02	-
Phenanthrene	0.02 ug/g dry	0.04	0.29	<0.02	-
Pyrene	0.02 ug/g dry	0.06	0.35	0.02	-
2-Fluorobiphenyl	Surrogate	91.8%	93.8%	69.9%	-
Terphenyl-d14	Surrogate	95.5%	93.5%	72.1%	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Decachlorobiphenyl	Surrogate	101%	96.0%	100%	-

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	10	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	5	ug/g						
Copper	ND	5	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.113*		*ug/g*		*113*	*40-147*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo[a]anthracene	ND	0.02	ug/g						
Benzo[a]pyrene	ND	0.02	ug/g						
Benzo[b]fluoranthene	ND	0.02	ug/g						
Benzo[g,h,i]perylene	ND	0.02	ug/g						
Benzo[k]fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo[a,h]anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*1.11*	*0.01*	*ug/g*		*82.9*	*32-156*			
Surrogate: Terphenyl-d14	*1.12*	*0.01*	*ug/g*		*83.8*	*39-146*			
Volatiles									
Benzene	ND	0.002	ug/g						
Bromodichloromethane	ND	0.002	ug/g						

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromoform	ND	0.002	ug/g						
Bromomethane	ND	0.003	ug/g						
Carbon Tetrachloride	ND	0.002	ug/g						
Chlorobenzene	ND	0.002	ug/g						
Chloroethane	ND	0.005	ug/g						
Chloroform	ND	0.003	ug/g						
Chloromethane	ND	0.020	ug/g						
Dibromochloromethane	ND	0.002	ug/g						
1,2-Dibromoethane	ND	0.002	ug/g						
1,2-Dichlorobenzene	ND	0.002	ug/g						
1,3-Dichlorobenzene	ND	0.002	ug/g						
1,4-Dichlorobenzene	ND	0.002	ug/g						
1,1-Dichloroethane	ND	0.002	ug/g						
1,2-Dichloroethane	ND	0.002	ug/g						
1,1-Dichloroethylene	ND	0.002	ug/g						
cis-1,2-Dichloroethylene	ND	0.002	ug/g						
trans-1,2-Dichloroethylene	ND	0.003	ug/g						
1,2-Dichloropropane	ND	0.002	ug/g						
cis-1,3-Dichloropropylene	ND	0.002	ug/g						
trans-1,3-Dichloropropylene	ND	0.002	ug/g						
Ethylbenzene	ND	0.002	ug/g						
Methylene Chloride	ND	0.003	ug/g						
Styrene	ND	0.002	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g						
Tetrachloroethylene	ND	0.002	ug/g						
Toluene	ND	0.002	ug/g						
1,1,1-Trichloroethane	ND	0.002	ug/g						
1,1,2-Trichloroethane	ND	0.002	ug/g						
Trichloroethylene	ND	0.003	ug/g						
Trichlorofluoromethane	ND	0.005	ug/g						
1,3,5-Trimethylbenzene	ND	0.003	ug/g						
Vinyl chloride	ND	0.002	ug/g						
m,p-Xylenes	ND	0.002	ug/g						
o-Xylene	ND	0.002	ug/g						
Surrogate: 4-Bromofluorobenzene	*0.126*		*ug/g*		*92.5*	*83-134*			
Surrogate: Dibromofluoromethane	*0.141*		*ug/g*		*104*	*78-124*			
Surrogate: Toluene-d8	*0.157*		*ug/g*		*115*	*76-118*			

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g dry	ND				32	
F2 PHCs (C10-C16)	ND	10	ug/g dry	ND				50	
F3 PHCs (C16-C34)	40	10	ug/g dry	21			60.6	50	QR-01
F4 PHCs (C34-C50)	ND	10	ug/g dry	ND				50	
Metals									
Antimony	ND	1	ug/g dry	ND				26	
Arsenic	1.1	1	ug/g dry	1.3			13.9	35	
Barium	89.8	10	ug/g dry	95.9			6.6	34	
Beryllium	ND	0.5	ug/g dry	ND				25	
Boron, available	ND	0.5	ug/g dry	ND				35	
Cadmium	ND	0.5	ug/g dry	ND				33	
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	16.7	5	ug/g dry	17.9			6.7	32	
Cobalt	ND	5	ug/g dry	ND				32	
Copper	9.9	5	ug/g dry	9.6			3.5	32	
Lead	17.8	1	ug/g dry	18.7			5.2	44	
Mercury	ND	0.1	ug/g dry	ND				35	
Molybdenum	ND	1	ug/g dry	ND				29	
Nickel	8.2	5	ug/g dry	8.6			4.2	29	
Selenium	ND	1	ug/g dry	ND				28	
Silver	ND	0.3	ug/g dry	ND				28	
Thallium	ND	1	ug/g dry	ND				27	
Vanadium	29.1	10	ug/g dry	30.5			4.9	27	
Zinc	46.4	20	ug/g dry	48.3			4.1	27	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				30	
Surrogate: Decachlorobiphenyl	*0.109*		*ug/g dry*	*ND*	*89.4*	*40-147*			
Physical Characteristics									
% Solids	79.7	0.1	% by Wt.	77.8			2.4	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g dry	ND				50	
Acenaphthylene	ND	0.02	ug/g dry	ND				50	
Anthracene	ND	0.02	ug/g dry	ND				50	
Benzo[a]anthracene	ND	0.02	ug/g dry	ND				50	
Benzo[a]pyrene	ND	0.02	ug/g dry	ND				50	
Benzo[b]fluoranthene	ND	0.02	ug/g dry	ND				50	
Benzo[g,h,i]perylene	ND	0.02	ug/g dry	ND				50	
Benzo[k]fluoranthene	ND	0.02	ug/g dry	ND				50	
Biphenyl	ND	0.02	ug/g dry	ND				50	
Chrysene	ND	0.02	ug/g dry	ND				50	
Dibenzo[a,h]anthracene	ND	0.02	ug/g dry	ND				50	
Fluoranthene	0.024	0.02	ug/g dry	0.025			2.4	50	
Fluorene	ND	0.02	ug/g dry	ND				50	
Indeno[1,2,3-cd]pyrene	ND	0.02	ug/g dry	ND				50	
1-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
2-Methylnaphthalene	ND	0.02	ug/g dry	ND				50	
Naphthalene	ND	0.02	ug/g dry	ND				50	
Phenanthrene	ND	0.02	ug/g dry	ND				50	
Pyrene	0.021	0.02	ug/g dry	0.021			0.3	50	
Surrogate: 2-Fluorobiphenyl	*1.16*	*0.01*	*ug/g dry*	*ND*	*65.4*	*32-156*			
Surrogate: Terphenyl-d14	*1.23*	*0.01*	*ug/g dry*	*ND*	*69.6*	*39-146*			

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	ND	0.002	ug/g dry	ND				50	
Bromodichloromethane	ND	0.002	ug/g dry	ND				50	
Bromoform	ND	0.002	ug/g dry	ND				50	
Bromomethane	ND	0.003	ug/g dry	ND				50	
Carbon Tetrachloride	ND	0.002	ug/g dry	ND				50	
Chlorobenzene	ND	0.002	ug/g dry	ND				50	
Chloroethane	ND	0.005	ug/g dry	ND				50	
Chloroform	ND	0.003	ug/g dry	ND				32	
Chloromethane	ND	0.020	ug/g dry	ND				50	
Dibromochloromethane	ND	0.002	ug/g dry	ND				50	
1,2-Dibromoethane	ND	0.002	ug/g dry	ND				50	
1,2-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,3-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,4-Dichlorobenzene	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethane	ND	0.002	ug/g dry	ND				27	
1,2-Dichloroethane	ND	0.002	ug/g dry	ND				50	
1,1-Dichloroethylene	ND	0.002	ug/g dry	ND				50	
cis-1,2-Dichloroethylene	ND	0.002	ug/g dry	ND				33	
trans-1,2-Dichloroethylene	ND	0.003	ug/g dry	ND				50	
1,2-Dichloropropane	ND	0.002	ug/g dry	ND				50	
cis-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
trans-1,3-Dichloropropylene	ND	0.002	ug/g dry	ND				50	
Ethylbenzene	ND	0.002	ug/g dry	ND				34	
Methylene Chloride	ND	0.003	ug/g dry	ND				50	
Styrene	ND	0.002	ug/g dry	ND				50	
1,1,1,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
1,1,2,2-Tetrachloroethane	ND	0.003	ug/g dry	ND				50	
Tetrachloroethylene	ND	0.002	ug/g dry	ND				32	
Toluene	ND	0.002	ug/g dry	ND				32	
1,1,1-Trichloroethane	ND	0.002	ug/g dry	ND				50	
1,1,2-Trichloroethane	ND	0.002	ug/g dry	ND				50	
Trichloroethylene	ND	0.003	ug/g dry	ND				31	
Trichlorofluoromethane	ND	0.005	ug/g dry	ND				50	
1,3,5-Trimethylbenzene	ND	0.003	ug/g dry	ND				43	
Vinyl chloride	ND	0.002	ug/g dry	ND				50	
m,p-Xylenes	ND	0.002	ug/g dry	ND				35	
o-Xylene	ND	0.002	ug/g dry	ND				50	
Surrogate: 4-Bromofluorobenzene	*0.154*		*ug/g dry*	*ND*	*91.8*	*83-134*			
Surrogate: Dibromofluoromethane	*0.175*		*ug/g dry*	*ND*	*104*	*78-124*			
Surrogate: Toluene-d8	*0.195*		*ug/g dry*	*ND*	*116*	*76-118*			

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	102	10	ug/g	ND	102	80-120			
F2 PHCs (C10-C16)	72	10	ug/g	ND	90.3	61-129			
F3 PHCs (C16-C34)	231	10	ug/g	ND	115	61-129			
F4 PHCs (C34-C50)	150	10	ug/g	ND	125	61-129			
Metals									
Antimony	46.7		ug/L	ND	93.4	80-120			
Arsenic	48.3		ug/L	ND	96.6	80-120			
Barium	48.8		ug/L	ND	97.7	80-120			
Beryllium	45.3		ug/L	ND	90.6	80-120			
Boron, available	4.20	0.5	ug/g	ND	84.1	70-122			
Cadmium	50.2		ug/L	ND	100	80-120			
Chromium (VI)	5.0	0.4	ug/g	ND	100	89-123			
Chromium	49.2		ug/L	ND	98.5	80-120			
Cobalt	47.6		ug/L	ND	95.1	80-120			
Copper	46.8		ug/L	ND	93.6	80-120			
Lead	47.5		ug/L	ND	95.1	80-120			
Mercury	1.64	0.1	ug/g	ND	109	72-128			
Molybdenum	49.9		ug/L	ND	99.9	80-120			
Nickel	45.3		ug/L	ND	90.6	80-120			
Selenium	47.7		ug/L	ND	95.3	80-120			
Silver	51.4		ug/L	ND	103	80-120			
Thallium	49.3		ug/L	ND	98.7	80-120			
Vanadium	49.7		ug/L	ND	99.4	80-120			
Zinc	44.5		ug/L	ND	89.1	80-120			
PCBs									
PCBs, total	0.403	0.05	ug/g	ND	101	58-147			
Surrogate: Decachlorobiphenyl	*0.114*		*ug/g*		*114*	*40-147*			
Semi-Volatiles									
Acenaphthene	0.123	0.02	ug/g	ND	73.5	31-121			
Acenaphthylene	0.121	0.02	ug/g	ND	72.4	26-124			
Anthracene	0.142	0.02	ug/g	ND	85.3	29-128			
Benzo[a]anthracene	0.142	0.02	ug/g	ND	85.0	29-129			
Benzo[a]pyrene	0.125	0.02	ug/g	ND	75.1	29-111			
Benzo[b]fluoranthene	0.140	0.02	ug/g	ND	84.1	26-111			
Benzo[g,h,i]perylene	0.118	0.02	ug/g	ND	70.5	23-128			
Benzo[k]fluoranthene	0.162	0.02	ug/g	ND	97.2	23-135			
Biphenyl	0.109	0.02	ug/g	ND	65.6	31-107			
Chrysene	0.153	0.02	ug/g	ND	91.5	28-136			
Dibenzo[a,h]anthracene	0.111	0.02	ug/g	ND	66.8	20-131			
Fluoranthene	0.152	0.02	ug/g	ND	91.1	24-131			
Fluorene	0.124	0.02	ug/g	ND	74.1	28-123			
Indeno[1,2,3-cd]pyrene	0.111	0.02	ug/g	ND	66.4	20-128			
1-Methylnaphthalene	0.108	0.02	ug/g	ND	65.0	24-127			
2-Methylnaphthalene	0.102	0.02	ug/g	ND	61.1	21-127			
Naphthalene	0.085	0.02	ug/g	ND	50.9	29-118			
Phenanthrene	0.142	0.02	ug/g	ND	85.1	34-108			
Pyrene	0.154	0.02	ug/g	ND	92.6	29-131			
Surrogate: 2-Fluorobiphenyl	*1.26*	0.01	*ug/g*		*94.7*	*32-156*			
Surrogate: Terphenyl-d14	*1.29*	0.01	*ug/g*		*97.0*	*39-146*			
Volatiles									
Benzene	0.0705	0.002	ug/g	ND	104	55-141			
Bromodichloromethane	0.0651	0.002	ug/g	ND	95.7	52-139			

PARACEL LABORATORIES LTD.

Order #: 0921032

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromoform	0.0670	0.002	ug/g	ND	98.5	52-170			
Bromomethane	0.0952	0.003	ug/g	ND	140	32-138			
Carbon Tetrachloride	0.0511	0.002	ug/g	ND	75.1	49-149			
Chlorobenzene	0.0504	0.002	ug/g	ND	74.1	64-137			
Chloroethane	0.0606	0.005	ug/g	ND	89.1	39-152			
Chloroform	0.0704	0.003	ug/g	ND	104	58-138			
Chloromethane	0.0852	0.020	ug/g	ND	125	24-163			
Dibromochloromethane	0.0624	0.002	ug/g	ND	91.7	61-153			
1,2-Dibromoethane	0.0695	0.002	ug/g	ND	102	61-145			
1,2-Dichlorobenzene	0.0490	0.002	ug/g	ND	72.0	60-150			
1,3-Dichlorobenzene	0.0642	0.002	ug/g	ND	94.4	62-149			
1,4-Dichlorobenzene	0.0670	0.002	ug/g	ND	98.6	63-132			
1,1-Dichloroethane	0.0731	0.002	ug/g	ND	108	51-156			
1,2-Dichloroethane	0.0841	0.002	ug/g	ND	124	50-140			
1,1-Dichloroethylene	0.0596	0.002	ug/g	ND	87.6	43-153			
cis-1,2-Dichloroethylene	0.0667	0.002	ug/g	ND	98.1	58-145			
trans-1,2-Dichloroethylene	0.0586	0.003	ug/g	ND	86.2	51-145			
1,2-Dichloropropane	0.0735	0.002	ug/g	ND	108	56-136			
cis-1,3-Dichloropropylene	0.0500	0.002	ug/g	ND	73.5	54-141			
trans-1,3-Dichloropropylene	0.0536	0.002	ug/g	ND	78.8	61-140			
Ethylbenzene	0.0583	0.002	ug/g	ND	85.7	61-139			
Methylene Chloride	0.0595	0.003	ug/g	ND	87.5	58-149			
Styrene	0.0557	0.002	ug/g	ND	81.9	63-143			
1,1,1,2-Tetrachloroethane	0.0537	0.003	ug/g	ND	79.0	61-148			
1,1,2,2-Tetrachloroethane	0.0790	0.003	ug/g	ND	116	50-157			
Tetrachloroethylene	0.0561	0.002	ug/g	ND	82.6	51-145			
Toluene	0.0523	0.002	ug/g	ND	77.0	54-136			
1,1,1-Trichloroethane	0.0562	0.002	ug/g	ND	82.7	55-140			
1,1,2-Trichloroethane	0.0691	0.002	ug/g	ND	102	63-144			
Trichloroethylene	0.0563	0.003	ug/g	ND	82.8	52-135			
Trichlorofluoromethane	0.0694	0.005	ug/g	ND	102	37-155			
1,3,5-Trimethylbenzene	0.0517	0.003	ug/g	ND	76.1	61-151			
Vinyl chloride	0.0934	0.002	ug/g	ND	137	31-159			
m,p-Xylenes	0.117	0.002	ug/g	ND	85.8	61-139			
o-Xylene	0.0647	0.002	ug/g	ND	95.2	60-142			
Surrogate: 4-Bromofluorobenzene	*0.118*		*ug/g*		*86.9*	*83-134*			
Surrogate: Dibromofluoromethane	*0.144*		*ug/g*		*106*	*78-124*			
Surrogate: Toluene-d8	*0.144*		*ug/g*		*106*	*76-118*			

Certificate of Analysis

Report Date: 27-May-2009
Order Date:19-May-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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www.paracellabs.com

Chain of Custody Record

№ 59673

Company Name: TROW ASSOCIATES
Contact Name: Mark McCalla
Address: 154 Colonade Rd.
Tel: 613-225-9940 Cell:
Email: mark.mccalla@trow.com

Project Ref: OTEN0001940GP.
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0921032	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PAH	VOC	PCBs	Metals	PHC (F1-F4)									Hazardous? (Y/N)
1	SS1	S		1	19/5/09	X	X	X	X	X									
2	SS2	↓		↓	↓	↓	↓	↓	↓	↓									
3	SS3	↓		↓	↓	↓	↓	↓	↓	↓									
4	SS4	↓		↓	↓	↓	↓	↓	↓	↓									
5	SS5	↓		↓	↓	↓	↓	↓	↓	↓									
6	SS6	↓		↓	↓	↓	↓	↓	↓	↓									
7	SS7	↓		↓	↓	↓	↓	↓	↓	↓									
8	SS8	↓		↓	↓	↓	↓	↓	↓	↓									
9	SS9	↓		↓	↓	↓	↓	↓	↓	↓									
10	SS10	↓		↓	↓	↓	↓	↓	↓	↓									

Comments:

Relinquished By: Derek Cailroy Date: 19/5/09 Time: 4:45	Received at Depot: Date: Time:	Received at Lab: Date: May 19/09 Time: 4:43	Verified By: Date: May 19/09 Time: 5:45

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Chain of Custody Record

№ 59674

Company Name: TRAW ASSOCIATES
Contact Name: Mark McCalla
Address:
Tel: Cell:
Email:

Project Ref: OTEN000194060P.
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 092032	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PAH	VOC	PCBs	Metals	PHC(F1-F4)									Hazardous? (Y/N)
1	SS11	S		1	19/5/09	X	X	X	X	X									
2	SS12	↓		↓		↓	↓	↓	↓	↓									
3	SS13	↓		↓		↓	↓	↓	↓	↓									
4	SS14	↓		↓		↓	↓	↓	↓	↓									
5	SS15	↓		↓		↓	↓	↓	↓	↓									
6	SS16	↓		↓		↓	↓	↓	↓	↓									
7	SS17	↓		↓		↓	↓	↓	↓	↓									
8	SS18	↓		↓		↓	↓	↓	↓	↓									
9	SS19	↓		↓		↓	↓	↓	↓	↓									
10	SS20	↓		↓		↓	↓	↓	↓	↓									

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: 19/5/09 Time: 4:45.	Date: Time:	Date: May 19/09 Time: 4:43	Date: May 19/09 Time: 5:45

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Chain of Custody Record

№ 59675

Company Name: TROW ASSOCIATES.
Contact Name: MARK MCCALLA
Address:
Tel: Cell:
Email:

Project Ref: OTEN00019406P.
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

	Sample Information					Analysis Required												
	Paracel Order # 092032 / Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PAH	VOC	PCBs	Metals	PHC (F1-F4)								Hazardous? (Y/N)
1	SS21	S		1	19/5/09.	X	X	X	X	X								
2	SS22																	
3	SS23																	
4	SS24																	
5	SS25																	
6	SS 70																	
7	SS 80																	
8																		
9																		
10																		

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: 19/5/09 Time: 4:45	Date: Time:	Date: Time:	Date: May 19/09 Time: 5:45

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 55097-098

Report Date: 28-Jan-2009
Order Date: 21-Jan-2009
Order #: 0904104

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0904104-01	MW09-2
0904104-02	MW09-3
0904104-03	MW09-4
0904104-04	MW09-5
0904104-05	MW09-6
0904104-06	MW09-7
0904104-07	MW09-8
0904104-08	MW09-9
0904104-09	MW09-10
0904104-10	MW09-11
0904104-11	MW09-12
0904104-12	MW09-13
0904104-13	MW09-14
0904104-14	MW09-15
0904104-15	MW09-150

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
CCME PHC F1	CWS Tier 1 - P&T GC-FID	23-Jan-09	27-Jan-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	23-Jan-09	23-Jan-09
Chromium, hexavalent	MOE E3056 - colourimetric	23-Jan-09	23-Jan-09
Mercury	EPA 245.1 - Cold Vapour AA	23-Jan-09	23-Jan-09
Metals, low level	EPA 200.8 - ICP-MS	22-Jan-09	23-Jan-09
PAHs by GC-MS, standard scan	EPA 625 - GC-MS, extraction	22-Jan-09	22-Jan-09
PCBs, total	EPA 608 - GC-ECD	26-Jan-09	26-Jan-09
VOCs	EPA 624 - P&T GC-MS	23-Jan-09	27-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-2	MW09-3	MW09-4	MW09-5
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-01	0904104-02	0904104-03	0904104-04
	MDL/Units	Water	Water	Water	Water
Metals					
Chromium (VI)	10 ug/L	<10	<10	<10	<10
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Antimony	0.5 ug/L	1.3	1.7	1.0	<0.5
Arsenic	1 ug/L	1	1	2	1
Barium	5 ug/L	23	64	117	96
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Boron	10.0 ug/L	67.0	177	65.3	51.6
Cadmium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Chromium	1 ug/L	2	2	4	1
Cobalt	0.5 ug/L	0.6	0.6	1.3	2.0
Copper	0.5 ug/L	6.1	5.7	3.7	0.8
Iron	100 ug/L	<100	<100	<100	<100
Lead	0.1 ug/L	<0.1	0.2	<0.1	<0.1
Magnesium	200 ug/L	12100	24600	16500	13900
Manganese	5 ug/L	21	31	925	1200
Molybdenum	1 ug/L	33	140	7	6
Nickel	1 ug/L	4	5	5	5
Selenium	1 ug/L	4	5	<1	<1
Silver	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Sodium	200 ug/L	53300	71300	45600	30700
Thallium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Vanadium	1 ug/L	3	2	7	<1
Zinc	10 ug/L	<10	13	12	<10
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	0.9	<0.5
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-2	MW09-3	MW09-4	MW09-5
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-01	0904104-02	0904104-03	0904104-04
	MDL/Units	Water	Water	Water	Water
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5 ug/L	<0.5	<0.5	1.8	<0.5
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	<4.0
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	0.5 ug/L	<0.5	6.5	128	<0.5
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	<0.5	3.2	<0.5
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	1.9	<0.5
o-Xylene	0.5 ug/L	<0.5	<0.5	0.9	<0.5
4-Bromofluorobenzene	Surrogate	100%	97.4%	98.6%	95.9%

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-2	MW09-3	MW09-4	MW09-5
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-01	0904104-02	0904104-03	0904104-04
	MDL/Units	Water	Water	Water	Water
Dibromofluoromethane	Surrogate	95.3%	95.0%	101%	96.0%
Toluene-d8	Surrogate	101%	101%	114%	102%
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	<200
F2 PHCs (C10-C16)	100 ug/L	<100	<100	863	<100
F3 PHCs (C16-C34)	100 ug/L	<100	<100	300	<100
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	<100
Semi-Volatiles					
Acenaphthene	0.05 ug/L	<0.05	0.14	1.09	0.40
Acenaphthylene	0.05 ug/L	<0.05	0.25	0.38	0.17
Anthracene	0.01 ug/L	0.03	0.12	0.08	0.05
Benzo[a]anthracene	0.01 ug/L	0.07	0.21	0.08	0.07
Benzo[a]pyrene	0.01 ug/L	0.03	0.13	0.04	0.03
Benzo[b]fluoranthene	0.05 ug/L	<0.05	0.18	<0.05	0.05
Benzo[g,h,i]perylene	0.05 ug/L	<0.05	0.13	<0.05	<0.05
Benzo[k]fluoranthene	0.05 ug/L	<0.05	0.10	<0.05	<0.05
Biphenyl	0.05 ug/L	<0.05	0.28	0.20	<0.05
Chrysene	0.05 ug/L	<0.05	0.23	0.05	0.05
Dibenzo[a,h]anthracene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.01 ug/L	0.08	0.45	0.13	0.17
Fluorene	0.05 ug/L	<0.05	0.22	1.59	0.43
Indeno[1,2,3-cd]pyrene	0.05 ug/L	<0.05	0.07	<0.05	<0.05
1-Methylnaphthalene	0.05 ug/L	<0.05	0.46	19.9	3.27
2-Methylnaphthalene	0.05 ug/L	0.05	0.52	4.63	1.14
Naphthalene	0.05 ug/L	0.06	0.54	4.10	1.12
Phenanthrene	0.05 ug/L	0.12	0.58	0.77	0.38
Pyrene	0.01 ug/L	0.07	0.49	0.12	0.17
2-Fluorobiphenyl	Surrogate	49.7%	58.2%	49.0%	49.5%
Terphenyl-d14	Surrogate	54.0%	62.7%	59.9%	54.3%
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	91.1%	80.0%	79.2%	86.0%

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-6	MW09-7	MW09-8	MW09-9
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-05	0904104-06	0904104-07	0904104-08
	MDL/Units	Water	Water	Water	Water
Metals					
Chromium (VI)	10 ug/L	<10	<10	<10	<10
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Antimony	0.5 ug/L	0.6	0.6	<0.5	0.8
Arsenic	1 ug/L	<1	<1	<1	3
Barium	5 ug/L	18	13	15	6
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Boron	10.0 ug/L	14.3	<10.0	13.4	18.6
Cadmium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Chromium	1 ug/L	1	<1	<1	1
Cobalt	0.5 ug/L	0.5	<0.5	<0.5	<0.5
Copper	0.5 ug/L	3.0	5.6	4.9	41.6
Iron	100 ug/L	<100	<100	<100	<100
Lead	0.1 ug/L	0.3	0.6	0.5	0.2
Magnesium	200 ug/L	3380	2440	3510	537
Manganese	5 ug/L	138	<5	27	<5
Molybdenum	1 ug/L	2	<1	2	5
Nickel	1 ug/L	2	1	1	1
Selenium	1 ug/L	<1	<1	<1	<1
Silver	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Sodium	200 ug/L	4240	4780	8210	4830
Thallium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Vanadium	1 ug/L	<1	<1	<1	6
Zinc	10 ug/L	<10	<10	<10	<10
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-6	MW09-7	MW09-8	MW09-9
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-05	0904104-06	0904104-07	0904104-08
	MDL/Units	Water	Water	Water	Water
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	<4.0
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
4-Bromofluorobenzene	Surrogate	99.3%	98.0%	97.2%	99.5%
Dibromofluoromethane	Surrogate	94.0%	92.6%	98.6%	97.7%

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-6	MW09-7	MW09-8	MW09-9
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-05	0904104-06	0904104-07	0904104-08
	MDL/Units	Water	Water	Water	Water
Toluene-d8	Surrogate	101%	102%	101%	99.9%
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	<200
F2 PHCs (C10-C16)	100 ug/L	1290	<100	<100	<100
F3 PHCs (C16-C34)	100 ug/L	920	<100	<100	<100
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	<100
Semi-Volatiles					
Acenaphthene	0.05 ug/L	0.29	0.17	1.14	0.50
Acenaphthylene	0.05 ug/L	0.80	0.24	1.33	0.59
Anthracene	0.01 ug/L	0.65	0.62	4.02	1.59
Benzo[a]anthracene	0.01 ug/L	0.54	1.05	8.60	2.71
Benzo[a]pyrene	0.01 ug/L	0.85	1.02	8.04	2.59
Benzo[b]fluoranthene	0.05 ug/L	1.11	1.25	10.6	3.38
Benzo[g,h,i]perylene	0.05 ug/L	0.82	0.65	4.42	1.57
Benzo[k]fluoranthene	0.05 ug/L	0.45	0.68	5.96	1.77
Biphenyl	0.05 ug/L	0.19	<0.05	0.25	0.10
Chrysene	0.05 ug/L	0.69	1.19	9.33	3.02
Dibenzo[a,h]anthracene	0.05 ug/L	0.14	0.18	0.98	0.38
Fluoranthene	0.01 ug/L	0.71	1.81	13.2	4.34
Fluorene	0.05 ug/L	0.66	0.21	1.54	0.69
Indeno[1,2,3-cd]pyrene	0.05 ug/L	0.59	0.56	4.06	1.39
1-Methylnaphthalene	0.05 ug/L	4.88	0.08	3.43	0.33
2-Methylnaphthalene	0.05 ug/L	2.35	0.10	5.70	0.35
Naphthalene	0.05 ug/L	0.91	0.30	5.55	0.77
Phenanthrene	0.05 ug/L	0.90	1.37	10.9	3.86
Pyrene	0.01 ug/L	0.81	1.60	12.0	3.80
2-Fluorobiphenyl	Surrogate	40.3%	57.3%	62.3%	71.7%
Terphenyl-d14	Surrogate	49.1%	67.0%	71.1%	82.1%
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	80.2%	74.8%	73.4%	56.7%

PARACEL LABORATORIES LTD.

Order #: 0904104

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Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-10	MW09-11	MW09-12	MW09-13
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-09	0904104-10	0904104-11	0904104-12
	MDL/Units	Water	Water	Water	Water
Metals					
Chromium (VI)	10 ug/L	<10	<10	<10	<10
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Antimony	0.5 ug/L	<0.5	0.6	<0.5	<0.5
Arsenic	1 ug/L	<1	3	<1	<1
Barium	5 ug/L	10	8	10	10
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Boron	10.0 ug/L	<10.0	12.0	<10.0	<10.0
Cadmium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Chromium	1 ug/L	<1	1	<1	<1
Cobalt	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Copper	0.5 ug/L	3.8	8.3	5.3	4.2
Iron	100 ug/L	<100	<100	<100	<100
Lead	0.1 ug/L	0.2	0.2	0.5	0.2
Magnesium	200 ug/L	3280	348	2360	3030
Manganese	5 ug/L	66	<5	<5	44
Molybdenum	1 ug/L	1	5	<1	9
Nickel	1 ug/L	1	3	1	2
Selenium	1 ug/L	<1	<1	<1	<1
Silver	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Sodium	200 ug/L	4590	4980	3910	5320
Thallium	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Vanadium	1 ug/L	<1	16	<1	<1
Zinc	10 ug/L	<10	<10	<10	<10
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-10	MW09-11	MW09-12	MW09-13
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-09	0904104-10	0904104-11	0904104-12
	MDL/Units	Water	Water	Water	Water
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	<4.0
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
m,p-Xylenes	0.5 ug/L	<0.5	1.0	<0.5	<0.5
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
4-Bromofluorobenzene	Surrogate	96.8%	96.3%	97.5%	98.4%
Dibromofluoromethane	Surrogate	93.4%	94.9%	95.2%	97.6%
Toluene-d8	Surrogate	102%	102%	101%	101%

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-10	MW09-11	MW09-12	MW09-13
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	21-Jan-09
	Sample ID:	0904104-09	0904104-10	0904104-11	0904104-12
	MDL/Units	Water	Water	Water	Water
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	<200
F2 PHCs (C10-C16)	100 ug/L	1590	172000	<100	344
F3 PHCs (C16-C34)	100 ug/L	320	27000	<100	1620
F4 PHCs (C34-C50)	100 ug/L	<100	<160	<100	680
Semi-Volatiles					
Acenaphthene	0.05 ug/L	7.13	3.12 [2]	0.25	<0.05
Acenaphthylene	0.05 ug/L	4.10	11.5 [2]	0.68	0.18
Anthracene	0.01 ug/L	3.99	5.10 [2]	0.71	0.19
Benzo[a]anthracene	0.01 ug/L	7.43	7.82 [2]	1.72	0.44
Benzo[a]pyrene	0.01 ug/L	6.23	7.56 [2]	1.65	0.45
Benzo[b]fluoranthene	0.05 ug/L	10.1	7.98 [2]	2.64	0.60
Benzo[g,h,i]perylene	0.05 ug/L	3.95	4.82 [2]	1.11	0.60
Benzo[k]fluoranthene	0.05 ug/L	5.05	4.02 [2]	1.02	0.22
Biphenyl	0.05 ug/L	<1.00 [1]	1.31 [2]	0.09	<0.05
Chrysene	0.05 ug/L	8.44	8.39 [2]	2.03	0.51
Dibenzo[a,h]anthracene	0.05 ug/L	<1.00 [1]	0.71 [2]	0.25	0.11
Fluoranthene	0.01 ug/L	11.1	19.0 [2]	2.57	0.62
Fluorene	0.05 ug/L	11.6	6.53 [2]	0.30	0.12
Indeno[1,2,3-cd]pyrene	0.05 ug/L	3.07	3.30 [2]	0.88	0.27
1-Methylnaphthalene	0.05 ug/L	115	12.4 [2]	0.22	0.23
2-Methylnaphthalene	0.05 ug/L	150	11.8 [2]	0.30	0.24
Naphthalene	0.05 ug/L	63.8	8.34 [2]	0.66	0.32
Phenanthrene	0.05 ug/L	14.4	19.9 [2]	2.18	0.69
Pyrene	0.01 ug/L	12.2	20.4 [2]	2.48	0.67
2-Fluorobiphenyl	Surrogate	70.2%	-	45.8%	45.3%
Terphenyl-d14	Surrogate	73.7%	-	56.3%	53.0%
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	57.9%	64.0%	81.2%	68.2%

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-14	MW09-15	MW09-150	-
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	-
	Sample ID:	0904104-13	0904104-14	0904104-15	-
	MDL/Units	Water	Water	Water	-
Metals					
Chromium (VI)	10 ug/L	<10	<10	<10	-
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	-
Antimony	0.5 ug/L	0.6	<0.5	<0.5	-
Arsenic	1 ug/L	<1	<1	<1	-
Barium	5 ug/L	9	10	10	-
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	-
Boron	10.0 ug/L	<10.0	<10.0	<10.0	-
Cadmium	0.1 ug/L	<0.1	<0.1	<0.1	-
Chromium	1 ug/L	<1	<1	<1	-
Cobalt	0.5 ug/L	<0.5	<0.5	<0.5	-
Copper	0.5 ug/L	4.0	3.0	2.6	-
Iron	100 ug/L	<100	<100	<100	-
Lead	0.1 ug/L	0.2	0.1	0.4	-
Magnesium	200 ug/L	2660	2340	2350	-
Manganese	5 ug/L	<5	<5	<5	-
Molybdenum	1 ug/L	<1	<1	<1	-
Nickel	1 ug/L	1	1	1	-
Selenium	1 ug/L	<1	<1	<1	-
Silver	0.1 ug/L	<0.1	<0.1	<0.1	-
Sodium	200 ug/L	4110	4000	4110	-
Thallium	0.1 ug/L	<0.1	<0.1	<0.1	-
Vanadium	1 ug/L	<1	<1	<1	-
Zinc	10 ug/L	<10	<10	<10	-
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	-
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	-
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	-

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-14	MW09-15	MW09-150	-
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	-
	Sample ID:	0904104-13	0904104-14	0904104-15	-
	MDL/Units	Water	Water	Water	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	-
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	-
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	-
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	-
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	-
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	-
4-Bromofluorobenzene	Surrogate	99.2%	99.1%	97.7%	-
Dibromofluoromethane	Surrogate	97.8%	93.7%	94.8%	-

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-14	MW09-15	MW09-150	-
	Sample Date:	21-Jan-09	21-Jan-09	21-Jan-09	-
	Sample ID:	0904104-13	0904104-14	0904104-15	-
	MDL/Units	Water	Water	Water	-
Toluene-d8	Surrogate	101%	100%	102%	-
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	<100	-
F3 PHCs (C16-C34)	100 ug/L	<100	<100	<100	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	-
Semi-Volatiles					
Acenaphthene	0.05 ug/L	0.05	0.06	<0.05	-
Acenaphthylene	0.05 ug/L	<0.05	<0.05	<0.05	-
Anthracene	0.01 ug/L	0.02	<0.01	0.01	-
Benzo[a]anthracene	0.01 ug/L	0.07	<0.01	0.04	-
Benzo[a]pyrene	0.01 ug/L	0.04	<0.01	<0.01	-
Benzo[b]fluoranthene	0.05 ug/L	0.07	<0.05	<0.05	-
Benzo[g,h,i]perylene	0.05 ug/L	<0.05	<0.05	<0.05	-
Benzo[k]fluoranthene	0.05 ug/L	<0.05	<0.05	<0.05	-
Biphenyl	0.05 ug/L	<0.05	<0.05	<0.05	-
Chrysene	0.05 ug/L	0.06	<0.05	<0.05	-
Dibenzo[a,h]anthracene	0.05 ug/L	<0.05	<0.05	<0.05	-
Fluoranthene	0.01 ug/L	0.11	0.03	0.05	-
Fluorene	0.05 ug/L	<0.05	<0.05	<0.05	-
Indeno[1,2,3-cd]pyrene	0.05 ug/L	<0.05	<0.05	<0.05	-
1-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	-
2-Methylnaphthalene	0.05 ug/L	0.05	<0.05	<0.05	-
Naphthalene	0.05 ug/L	0.10	0.07	<0.05	-
Phenanthrene	0.05 ug/L	0.12	0.05	0.05	-
Pyrene	0.01 ug/L	0.11	0.03	0.05	-
2-Fluorobiphenyl	Surrogate	63.5%	64.4%	70.4%	-
Terphenyl-d14	Surrogate	68.8%	71.7%	74.4%	-
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	-
Decachlorobiphenyl	Surrogate	74.8%	77.2%	86.0%	-

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Metals									
Chromium (VI)	ND	10	ug/L						
Mercury	ND	0.1	ug/L						
Antimony	ND	0.5	ug/L						
Arsenic	ND	1	ug/L						
Barium	ND	5	ug/L						
Beryllium	ND	0.5	ug/L						
Boron	ND	10.0	ug/L						
Cadmium	ND	0.1	ug/L						
Chromium	ND	1	ug/L						
Cobalt	ND	0.5	ug/L						
Copper	ND	0.5	ug/L						
Iron	ND	100	ug/L						
Lead	ND	0.1	ug/L						
Magnesium	ND	200	ug/L						
Manganese	ND	5	ug/L						
Molybdenum	ND	1	ug/L						
Nickel	ND	1	ug/L						
Selenium	ND	1	ug/L						
Silver	ND	0.1	ug/L						
Sodium	ND	200	ug/L						
Thallium	ND	0.1	ug/L						
Vanadium	ND	1	ug/L						
Zinc	ND	10	ug/L						
PCBs									
PCBs, total	ND	0.05	ug/L						
Surrogate: Decachlorobiphenyl	*0.368*		*ug/L*		*73.5*	*37-130*			
Semi-Volatiles									
Acenaphthene	ND	0.05	ug/L						
Acenaphthylene	ND	0.05	ug/L						
Anthracene	ND	0.01	ug/L						
Benzo[a]anthracene	ND	0.01	ug/L						
Benzo[a]pyrene	ND	0.01	ug/L						
Benzo[b]fluoranthene	ND	0.05	ug/L						
Benzo[g,h,i]perylene	ND	0.05	ug/L						
Benzo[k]fluoranthene	ND	0.05	ug/L						
Biphenyl	ND	0.05	ug/L						
Chrysene	ND	0.05	ug/L						
Dibenzo[a,h]anthracene	ND	0.05	ug/L						
Fluoranthene	ND	0.01	ug/L						
Fluorene	ND	0.05	ug/L						
Indeno[1,2,3-cd]pyrene	ND	0.05	ug/L						
1-Methylnaphthalene	ND	0.05	ug/L						
2-Methylnaphthalene	ND	0.05	ug/L						
Naphthalene	ND	0.05	ug/L						
Phenanthrene	ND	0.05	ug/L						
Pyrene	ND	0.01	ug/L						
Surrogate: 2-Fluorobiphenyl	*13.1*		*ug/L*		*65.3*	*31-154*			
Surrogate: Terphenyl-d14	*13.7*		*ug/L*		*68.6*	*37-156*			

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	ND	0.5	ug/L						
Bromodichloromethane	ND	0.4	ug/L						
Bromoform	ND	0.5	ug/L						
Bromomethane	ND	0.7	ug/L						
Carbon Tetrachloride	ND	0.5	ug/L						
Chlorobenzene	ND	0.4	ug/L						
Chloroethane	ND	1.0	ug/L						
Chloroform	ND	0.5	ug/L						
Chloromethane	ND	3.0	ug/L						
Dibromochloromethane	ND	0.5	ug/L						
1,2-Dibromoethane	ND	1.0	ug/L						
1,2-Dichlorobenzene	ND	0.4	ug/L						
1,3-Dichlorobenzene	ND	0.4	ug/L						
1,4-Dichlorobenzene	ND	0.4	ug/L						
1,1-Dichloroethane	ND	0.5	ug/L						
1,2-Dichloroethane	ND	0.5	ug/L						
1,1-Dichloroethylene	ND	0.5	ug/L						
cis-1,2-Dichloroethylene	ND	0.4	ug/L						
trans-1,2-Dichloroethylene	ND	1.0	ug/L						
1,2-Dichloropropane	ND	0.5	ug/L						
cis-1,3-Dichloropropylene	ND	0.4	ug/L						
trans-1,3-Dichloropropylene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Methylene Chloride	ND	4.0	ug/L						
Styrene	ND	0.4	ug/L						
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L						
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L						
Tetrachloroethylene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
1,1,1-Trichloroethane	ND	0.4	ug/L						
1,1,2-Trichloroethane	ND	0.6	ug/L						
Trichloroethylene	ND	0.4	ug/L						
Trichlorofluoromethane	ND	1.0	ug/L						
1,3,5-Trimethylbenzene	ND	0.5	ug/L						
Vinyl chloride	ND	0.4	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Surrogate: 4-Bromofluorobenzene	*79.2*		*ug/L*		*99.1*	*83-134*			
Surrogate: Dibromofluoromethane	*79.3*		*ug/L*		*99.1*	*78-124*			
Surrogate: Toluene-d8	*71.1*		*ug/L*		*88.9*	*76-118*			

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L	ND				32	
Metals									
Chromium (VI)	ND	10	ug/L	ND				13	
Mercury	ND	0.1	ug/L	ND				20	
Antimony	1.04	0.5	ug/L	1.94			60.7	26	QR-01
Arsenic	ND	1	ug/L	ND				29	
Barium	21.6	5	ug/L	21.8			1.1	34	
Beryllium	ND	0.5	ug/L	ND				25	
Boron	36	10.0	ug/L	35			3.2	33	
Cadmium	ND	0.1	ug/L	ND				33	
Chromium	5.5	1	ug/L	5.9			7.1	32	
Cobalt	ND	0.5	ug/L	ND				32	
Copper	2.39	0.5	ug/L	2.43			1.7	32	
Iron	ND	100	ug/L	ND				32	
Lead	ND	0.1	ug/L	ND				32	
Magnesium	8600	200	ug/L	8480			1.4	30	
Manganese	ND	5	ug/L	ND				29	
Molybdenum	13.4	1	ug/L	13.6			1.4	29	
Nickel	1.6	1	ug/L	1.6			0.4	29	
Selenium	ND	1	ug/L	ND				28	
Silver	0.39	0.1	ug/L	0.49			23.9	28	
Sodium	15500	200	ug/L	14700			5.4	27	
Thallium	ND	0.1	ug/L	ND				27	
Vanadium	1.6	1	ug/L	1.7			6.7	27	
Zinc	ND	10	ug/L	ND				27	
Volatiles									
Benzene	ND	0.5	ug/L	ND				20	
Bromodichloromethane	ND	0.4	ug/L	ND				25	
Bromoform	ND	0.5	ug/L	ND				25	
Bromomethane	ND	0.7	ug/L	ND				25	
Carbon Tetrachloride	ND	0.5	ug/L	ND				25	
Chlorobenzene	ND	0.4	ug/L	ND				25	
Chloroethane	ND	1.0	ug/L	ND				25	
Chloroform	ND	0.5	ug/L	ND				19	
Chloromethane	ND	3.0	ug/L	ND				25	
Dibromochloromethane	ND	0.5	ug/L	ND				25	
1,2-Dibromoethane	ND	1.0	ug/L	ND				25	
1,2-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,3-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,4-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,1-Dichloroethane	ND	0.5	ug/L	ND				21	
1,2-Dichloroethane	ND	0.5	ug/L	ND				25	
1,1-Dichloroethylene	ND	0.5	ug/L	ND				21	
cis-1,2-Dichloroethylene	ND	0.4	ug/L	ND				20	
trans-1,2-Dichloroethylene	ND	1.0	ug/L	ND				25	
1,2-Dichloropropane	ND	0.5	ug/L	ND				25	
cis-1,3-Dichloropropylene	ND	0.4	ug/L	ND				25	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND				25	
Ethylbenzene	ND	0.5	ug/L	ND				35	
Methylene Chloride	ND	4.0	ug/L	ND				25	
Styrene	ND	0.4	ug/L	ND				25	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND				25	

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L	ND				25	
Tetrachloroethylene	ND	0.5	ug/L	ND				31	
Toluene	ND	0.5	ug/L	ND				30	
1,1,1-Trichloroethane	ND	0.4	ug/L	ND				25	
1,1,2-Trichloroethane	ND	0.6	ug/L	ND				25	
Trichloroethylene	ND	0.4	ug/L	ND				30	
Trichlorofluoromethane	ND	1.0	ug/L	ND				25	
1,3,5-Trimethylbenzene	ND	0.5	ug/L	ND				20	
Vinyl chloride	ND	0.4	ug/L	ND				25	
m,p-Xylenes	ND	0.5	ug/L	ND				34	
o-Xylene	ND	0.5	ug/L	ND				32	
Surrogate: 4-Bromofluorobenzene	*80.8*		*ug/L*	*ND*	*101*	*83-134*			
Surrogate: Dibromofluoromethane	*73.7*		*ug/L*	*ND*	*92.1*	*78-124*			
Surrogate: Toluene-d8	*82.1*		*ug/L*	*ND*	*103*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	2150	200	ug/L	ND	108	68-117			
F2 PHCs (C10-C16)	1290	100	ug/L	ND	80.5	61-129			
F3 PHCs (C16-C34)	4000	100	ug/L	ND	100	61-129			
F4 PHCs (C34-C50)	2420	100	ug/L	ND	101	61-129			
Metals									
Chromium (VI)	196	10	ug/L	ND	98.0	75-120			
Mercury	3.96	0.1	ug/L	ND	132	78-137			
Antimony	57.5		ug/L	1.94	111	78-126			
Arsenic	62.4		ug/L	0.7	123	83-119			QS-02
Barium	72.6		ug/L	21.8	101	83-116			
Beryllium	60.7		ug/L	0.0002	121	72-132			
Boron	99		ug/L	35	128	71-128			
Cadmium	53.1		ug/L	0.02	106	78-119			
Chromium	55.2		ug/L	5.9	98.5	80-124			
Cobalt	50.5		ug/L	0.05	101	78-125			
Copper	50.8		ug/L	2.43	96.7	75-123			
Iron	1040		ug/L	6	104	66-119			
Lead	52.0		ug/L	ND	104	77-126			
Magnesium	9110		ug/L	8480	62.7	75-131			QS-02
Manganese	51.2		ug/L	0.8	101	79-123			
Molybdenum	66.9		ug/L	13.6	107	82-119			
Nickel	50.3		ug/L	1.6	97.4	78-119			
Selenium	64.9		ug/L	0.9	128	81-125			QS-02
Silver	51.2		ug/L	0.49	101	70-128			
Sodium	15300		ug/L	14700	65.1	67-132			QS-02
Thallium	50.3		ug/L	0.03	101	82-127			
Vanadium	53.2		ug/L	1.7	103	82-123			
Zinc	62		ug/L	8	108	78-130			
PCBs									
PCBs, total	0.742	0.05	ug/L	ND	74.2	54-137			
Surrogate: Decachlorobiphenyl	*0.389*		*ug/L*		*77.8*	*37-130*			
Semi-Volatiles									
Acenaphthene	4.01	0.05	ug/L	ND	80.2	32-116			
Acenaphthylene	4.27	0.05	ug/L	ND	85.4	26-120			
Anthracene	4.53	0.01	ug/L	ND	90.6	29-126			
Benzo[a]anthracene	5.12	0.01	ug/L	ND	102	29-126			
Benzo[a]pyrene	4.86	0.01	ug/L	ND	97.2	29-111			
Benzo[b]fluoranthene	5.44	0.05	ug/L	ND	109	26-111			
Benzo[g,h,i]perylene	4.41	0.05	ug/L	ND	88.2	23-128			
Benzo[k]fluoranthene	5.34	0.05	ug/L	ND	107	23-135			
Biphenyl	4.18	0.05	ug/L	ND	83.7	31-107			
Chrysene	5.55	0.05	ug/L	ND	111	29-137			
Dibenzo[a,h]anthracene	4.22	0.05	ug/L	ND	84.4	20-131			
Fluoranthene	4.48	0.01	ug/L	ND	89.7	24-131			
Fluorene	4.66	0.05	ug/L	ND	93.2	28-123			
Indeno[1,2,3-cd]pyrene	4.24	0.05	ug/L	ND	84.8	20-128			
1-Methylnaphthalene	3.38	0.05	ug/L	ND	67.6	25-127			
2-Methylnaphthalene	3.56	0.05	ug/L	ND	71.1	21-119			
Naphthalene	3.59	0.05	ug/L	ND	71.7	29-118			
Phenanthrene	4.60	0.05	ug/L	ND	91.9	34-108			
Pyrene	4.70	0.01	ug/L	ND	94.1	29-131			
Surrogate: 2-Fluorobiphenyl	*9.71*		*ug/L*		*48.6*	*31-154*			
Surrogate: Terphenyl-d14	*13.7*		*ug/L*		*68.4*	*37-156*			

PARACEL LABORATORIES LTD.

Order #: 0904104

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	35.8	0.5	ug/L	ND	89.6	55-141			
Bromodichloromethane	36.6	0.4	ug/L	ND	91.4	52-139			
Bromoform	38.5	0.5	ug/L	ND	96.2	52-170			
Bromomethane	46.1	0.7	ug/L	ND	115	32-138			
Carbon Tetrachloride	37.2	0.5	ug/L	ND	93.0	49-149			
Chlorobenzene	37.6	0.4	ug/L	ND	93.9	64-137			
Chloroethane	38.3	1.0	ug/L	ND	95.8	39-152			
Chloroform	35.4	0.5	ug/L	ND	88.4	58-138			
Chloromethane	37.2	3.0	ug/L	ND	93.0	24-163			
Dibromochloromethane	39.7	0.5	ug/L	ND	99.3	61-153			
1,2-Dibromoethane	39.1	1.0	ug/L	ND	97.7	61-145			
1,2-Dichlorobenzene	35.4	0.4	ug/L	ND	88.5	60-150			
1,3-Dichlorobenzene	35.0	0.4	ug/L	ND	87.6	62-149			
1,4-Dichlorobenzene	35.8	0.4	ug/L	ND	89.5	63-132			
1,1-Dichloroethane	35.1	0.5	ug/L	ND	87.6	51-156			
1,2-Dichloroethane	37.0	0.5	ug/L	ND	92.5	50-140			
1,1-Dichloroethylene	38.0	0.5	ug/L	ND	95.0	43-153			
cis-1,2-Dichloroethylene	35.8	0.4	ug/L	ND	89.5	58-145			
trans-1,2-Dichloroethylene	36.3	1.0	ug/L	ND	90.7	51-145			
1,2-Dichloropropane	36.4	0.5	ug/L	ND	91.1	56-136			
cis-1,3-Dichloropropylene	38.0	0.4	ug/L	ND	95.0	54-141			
trans-1,3-Dichloropropylene	43.5	0.5	ug/L	ND	109	61-140			
Ethylbenzene	39.6	0.5	ug/L	ND	98.9	61-139			
Methylene Chloride	36.2	4.0	ug/L	ND	90.5	58-149			
Styrene	39.5	0.4	ug/L	ND	98.8	63-143			
1,1,1,2-Tetrachloroethane	39.2	0.5	ug/L	ND	98.0	61-148			
1,1,2,2-Tetrachloroethane	47.6	0.6	ug/L	ND	119	50-157			
Tetrachloroethylene	38.0	0.5	ug/L	ND	94.9	51-145			
Toluene	36.3	0.5	ug/L	ND	90.7	54-136			
1,1,1-Trichloroethane	36.5	0.4	ug/L	ND	91.2	55-140			
1,1,2-Trichloroethane	38.6	0.6	ug/L	ND	96.6	63-144			
Trichloroethylene	37.5	0.4	ug/L	ND	93.8	52-135			
Trichlorofluoromethane	41.6	1.0	ug/L	ND	104	37-155			
1,3,5-Trimethylbenzene	35.6	0.5	ug/L	ND	88.9	61-151			
Vinyl chloride	39.2	0.4	ug/L	ND	98.0	31-159			
m,p-Xylenes	78.0	0.5	ug/L	ND	97.5	61-139			
o-Xylene	39.3	0.5	ug/L	ND	98.2	60-142			
Surrogate: 4-Bromofluorobenzene	*78.8*		*ug/L*		*98.5*	*83-134*			
Surrogate: Dibromofluoromethane	*78.8*		*ug/L*		*98.4*	*78-124*			
Surrogate: Toluene-d8	*85.9*		*ug/L*		*107*	*76-118*			

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:21-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- GEN07 :Elevated detection limit because of dilution required due to high target analyte concentration.
2- ORG09 :Surrogates not available due to extract dilution.
3- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.
4- QS-02 : Spike level outside of control limits. Analysis batch accepted based on other QC included in the batch.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Ottawa, Ontario K1G 4J8
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e: paracel@paracellabs.com
www.paracellabs.com

Chain of Custody Record
№ 55097
Pg. 1 of 2

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTE00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [✓] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A–Air O–Other RDW–Regulated Drinking Water

Paracel Order # 090104	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC(F1 to F4)	PAH	PCB	VOC	Metals								Hazardous? (Y/N)
1	MW09-2	GW		6	Jan 21/09	X	X	X	X	X								
2	MW09-3																	
3	MW09-4																	
4	MW09-5																	
5	MW09-6																	
6	MW09-7																	
7	MW09-8																	
8	MW09-9																	
9	MW09-10																	
10	MW09-11																	

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 21/09 Time: 5:15	Date: Time:	Date: Jan 21/09 Time: 5:15	Date: Jan 22/09 Time: 7:45

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Chain of Custody Record
№ 55098

Company Name: Trow
Contact Name: Mark McLaddn
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEN0001940 6P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0904104	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1 + F2)	PAH	PCB	VOC	Metals								Hazardous? (Y/N)
1	MW09-12	GW		6	Jan 21/09	X	X	X	X	X								
2	MW09-13	↓		↓	↓	↓	↓	↓	↓	↓								
3	MW09-14	↓		↓	↓	↓	↓	↓	↓	↓								
4	MW09-15	↓		↓	↓	↓	↓	↓	↓	↓								
5	MW09-150	↓		↓	↓	↓	↓	↓	↓	↓								
6																		
7																		
8																		
9																		
10																		

Comments:
* MW09-150 - PHC bottle (500mL) broke so a 1L amber was used and "PHC" is written on it.

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Jan 21/09 Time: 5:15	Date: Time:	Date: Jan 21/09 Time: 5:15pm	Date: Jan 22/09 Time: 7:49

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 55099

Report Date: 28-Jan-2009
Order Date: 23-Jan-2009
Order #: 0904143

This Certificate of Analysis contains analytical data applicable to the following samples submitted:

Paracel ID	Client ID
0904143-01	MW09-1

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
CCME PHC F1	CWS Tier 1 - P&T GC-FID	23-Jan-09	28-Jan-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	23-Jan-09	24-Jan-09
Chromium, hexavalent	MOE E3056 - colourimetric	23-Jan-09	23-Jan-09
Mercury	EPA 245.1 - Cold Vapour AA	27-Jan-09	27-Jan-09
Metals, low level	EPA 200.8 - ICP-MS	26-Jan-09	26-Jan-09
PAHs by GC-MS, standard scan	EPA 625 - GC-MS, extraction	27-Jan-09	27-Jan-09
PCBs, total	EPA 608 - GC-ECD	26-Jan-09	27-Jan-09
VOCs	EPA 624 - P&T GC-MS	23-Jan-09	28-Jan-09

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1	-	-	-
	Sample Date:	22-Jan-09	-	-	-
	Sample ID:	0904143-01	-	-	-
	MDL/Units	Water	-	-	-
Metals					
Chromium (VI)	10 ug/L	<10	-	-	-
Mercury	0.1 ug/L	<0.1	-	-	-
Antimony	0.5 ug/L	0.5	-	-	-
Arsenic	1 ug/L	1	-	-	-
Barium	5 ug/L	70	-	-	-
Beryllium	0.5 ug/L	<0.5	-	-	-
Boron	10.0 ug/L	218	-	-	-
Cadmium	0.1 ug/L	<0.1	-	-	-
Chromium	1 ug/L	5	-	-	-
Cobalt	0.5 ug/L	1.2	-	-	-
Copper	0.5 ug/L	6.8	-	-	-
Iron	100 ug/L	<100	-	-	-
Lead	0.1 ug/L	<0.1	-	-	-
Magnesium	200 ug/L	27700	-	-	-
Manganese	5 ug/L	30	-	-	-
Molybdenum	1 ug/L	7	-	-	-
Nickel	1 ug/L	6	-	-	-
Selenium	1 ug/L	<1	-	-	-
Silver	0.1 ug/L	<0.1	-	-	-
Sodium	200 ug/L	267000	-	-	-
Thallium	0.1 ug/L	<0.1	-	-	-
Vanadium	1 ug/L	3	-	-	-
Zinc	10 ug/L	47	-	-	-
Volatiles					
Benzene	0.5 ug/L	<0.5	-	-	-
Bromodichloromethane	0.4 ug/L	<0.4	-	-	-
Bromoform	0.5 ug/L	<0.5	-	-	-
Bromomethane	0.7 ug/L	<0.7	-	-	-
Carbon Tetrachloride	0.5 ug/L	<0.5	-	-	-
Chlorobenzene	0.4 ug/L	<0.4	-	-	-
Chloroethane	1.0 ug/L	<1.0	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1	-	-	-
	Sample Date:	22-Jan-09	-	-	-
	Sample ID:	0904143-01	-	-	-
	MDL/Units	Water	-	-	-
Chloroform	0.5 ug/L	<0.5	-	-	-
Chloromethane	3.0 ug/L	<3.0	-	-	-
Dibromochloromethane	0.5 ug/L	<0.5	-	-	-
1,2-Dibromoethane	1.0 ug/L	<1.0	-	-	-
1,2-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,3-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,4-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,1-Dichloroethane	0.5 ug/L	<0.5	-	-	-
1,2-Dichloroethane	0.5 ug/L	<0.5	-	-	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	-	-	-
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	-	-	-
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	-	-	-
1,2-Dichloropropane	0.5 ug/L	<0.5	-	-	-
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	-	-	-
Ethylbenzene	0.5 ug/L	<0.5	-	-	-
Methylene Chloride	4.0 ug/L	<4.0	-	-	-
Styrene	0.4 ug/L	<0.4	-	-	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	-	-	-
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	-	-	-
Tetrachloroethylene	0.5 ug/L	<0.5	-	-	-
Toluene	0.5 ug/L	<0.5	-	-	-
1,1,1-Trichloroethane	0.4 ug/L	<0.4	-	-	-
1,1,2-Trichloroethane	0.6 ug/L	<0.6	-	-	-
Trichloroethylene	0.4 ug/L	<0.4	-	-	-
Trichlorofluoromethane	1.0 ug/L	<1.0	-	-	-
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	-	-	-
Vinyl chloride	0.4 ug/L	<0.4	-	-	-
m,p-Xylenes	0.5 ug/L	<0.5	-	-	-
o-Xylene	0.5 ug/L	<0.5	-	-	-
4-Bromofluorobenzene	Surrogate	97.1%	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-1	-	-	-
	Sample Date:	22-Jan-09	-	-	-
	Sample ID:	0904143-01	-	-	-
	MDL/Units	Water	-	-	-
Dibromofluoromethane	Surrogate	98.1%	-	-	-
Toluene-d8	Surrogate	99.9%	-	-	-
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	-	-	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	-	-
F3 PHCs (C16-C34)	100 ug/L	<100	-	-	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	-	-
Semi-Volatiles					
Acenaphthene	0.05 ug/L	<0.05	-	-	-
Acenaphthylene	0.05 ug/L	<0.05	-	-	-
Anthracene	0.01 ug/L	0.04	-	-	-
Benzo[a]anthracene	0.01 ug/L	0.05	-	-	-
Benzo[a]pyrene	0.01 ug/L	0.02	-	-	-
Benzo[b]fluoranthene	0.05 ug/L	<0.05	-	-	-
Benzo[g,h,i]perylene	0.05 ug/L	<0.05	-	-	-
Benzo[k]fluoranthene	0.05 ug/L	<0.05	-	-	-
Biphenyl	0.05 ug/L	0.05	-	-	-
Chrysene	0.05 ug/L	<0.05	-	-	-
Dibenzo[a,h]anthracene	0.05 ug/L	<0.05	-	-	-
Fluoranthene	0.01 ug/L	0.05	-	-	-
Fluorene	0.05 ug/L	<0.05	-	-	-
Indeno[1,2,3-cd]pyrene	0.05 ug/L	<0.05	-	-	-
1-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-
2-Methylnaphthalene	0.05 ug/L	0.05	-	-	-
Naphthalene	0.05 ug/L	0.11	-	-	-
Phenanthrene	0.05 ug/L	0.12	-	-	-
Pyrene	0.01 ug/L	0.05	-	-	-
2-Fluorobiphenyl	Surrogate	57.7%	-	-	-
Terphenyl-d14	Surrogate	64.3%	-	-	-
PCBs					
PCBs, total	0.05 ug/L	<0.05	-	-	-
Decachlorobiphenyl	Surrogate	77.1%	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Metals									
Chromium (VI)	ND	10	ug/L						
Mercury	ND	0.1	ug/L						
Antimony	ND	0.5	ug/L						
Arsenic	ND	1	ug/L						
Barium	ND	5	ug/L						
Beryllium	ND	0.5	ug/L						
Boron	ND	10.0	ug/L						
Cadmium	ND	0.1	ug/L						
Chromium	ND	1	ug/L						
Cobalt	ND	0.5	ug/L						
Copper	ND	0.5	ug/L						
Iron	ND	100	ug/L						
Lead	ND	0.1	ug/L						
Magnesium	ND	200	ug/L						
Manganese	ND	5	ug/L						
Molybdenum	ND	1	ug/L						
Nickel	ND	1	ug/L						
Selenium	ND	1	ug/L						
Silver	ND	0.1	ug/L						
Sodium	ND	200	ug/L						
Thallium	ND	0.1	ug/L						
Vanadium	ND	1	ug/L						
Zinc	ND	10	ug/L						
PCBs									
PCBs, total	ND	0.05	ug/L						
Surrogate: Decachlorobiphenyl	*0.368*		*ug/L*		*73.5*	*37-130*			
Semi-Volatiles									
Acenaphthene	ND	0.05	ug/L						
Acenaphthylene	ND	0.05	ug/L						
Anthracene	ND	0.01	ug/L						
Benzo[a]anthracene	ND	0.01	ug/L						
Benzo[a]pyrene	ND	0.01	ug/L						
Benzo[b]fluoranthene	ND	0.05	ug/L						
Benzo[g,h,i]perylene	ND	0.05	ug/L						
Benzo[k]fluoranthene	ND	0.05	ug/L						
Biphenyl	ND	0.05	ug/L						
Chrysene	ND	0.05	ug/L						
Dibenzo[a,h]anthracene	ND	0.05	ug/L						
Fluoranthene	ND	0.01	ug/L						
Fluorene	ND	0.05	ug/L						
Indeno[1,2,3-cd]pyrene	ND	0.05	ug/L						
1-Methylnaphthalene	ND	0.05	ug/L						
2-Methylnaphthalene	ND	0.05	ug/L						
Naphthalene	ND	0.05	ug/L						
Phenanthrene	ND	0.05	ug/L						
Pyrene	ND	0.01	ug/L						
Surrogate: 2-Fluorobiphenyl	*13.1*		*ug/L*		*65.3*	*31-154*			
Surrogate: Terphenyl-d14	*13.7*		*ug/L*		*68.6*	*37-156*			

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	ND	0.5	ug/L						
Bromodichloromethane	ND	0.4	ug/L						
Bromoform	ND	0.5	ug/L						
Bromomethane	ND	0.7	ug/L						
Carbon Tetrachloride	ND	0.5	ug/L						
Chlorobenzene	ND	0.4	ug/L						
Chloroethane	ND	1.0	ug/L						
Chloroform	ND	0.5	ug/L						
Chloromethane	ND	3.0	ug/L						
Dibromochloromethane	ND	0.5	ug/L						
1,2-Dibromoethane	ND	1.0	ug/L						
1,2-Dichlorobenzene	ND	0.4	ug/L						
1,3-Dichlorobenzene	ND	0.4	ug/L						
1,4-Dichlorobenzene	ND	0.4	ug/L						
1,1-Dichloroethane	ND	0.5	ug/L						
1,2-Dichloroethane	ND	0.5	ug/L						
1,1-Dichloroethylene	ND	0.5	ug/L						
cis-1,2-Dichloroethylene	ND	0.4	ug/L						
trans-1,2-Dichloroethylene	ND	1.0	ug/L						
1,2-Dichloropropane	ND	0.5	ug/L						
cis-1,3-Dichloropropylene	ND	0.4	ug/L						
trans-1,3-Dichloropropylene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Methylene Chloride	ND	4.0	ug/L						
Styrene	ND	0.4	ug/L						
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L						
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L						
Tetrachloroethylene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
1,1,1-Trichloroethane	ND	0.4	ug/L						
1,1,2-Trichloroethane	ND	0.6	ug/L						
Trichloroethylene	ND	0.4	ug/L						
Trichlorofluoromethane	ND	1.0	ug/L						
1,3,5-Trimethylbenzene	ND	0.5	ug/L						
Vinyl chloride	ND	0.4	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Surrogate: 4-Bromofluorobenzene	*79.2*		*ug/L*		*99.1*	*83-134*			
Surrogate: Dibromofluoromethane	*79.3*		*ug/L*		*99.1*	*78-124*			
Surrogate: Toluene-d8	*71.1*		*ug/L*		*88.9*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L	ND				32	
Metals									
Chromium (VI)	ND	10	ug/L	ND				13	
Mercury	ND	0.1	ug/L	ND				20	
Antimony	0.96	0.5	ug/L	1.10			14.1	26	
Arsenic	ND	1	ug/L	ND				29	
Barium	48.8	5	ug/L	46.9			3.9	34	
Beryllium	ND	0.5	ug/L	ND				25	
Boron	12	10.0	ug/L	12			5.0	33	
Cadmium	ND	0.1	ug/L	ND				33	
Chromium	4.8	1	ug/L	5.4			11.8	32	
Cobalt	ND	0.5	ug/L	ND				32	
Copper	15.1	0.5	ug/L	16.3			8.2	32	
Iron	526	100	ug/L	549			4.2	32	
Lead	ND	0.1	ug/L	ND				32	
Magnesium	2430	200	ug/L	2560			5.0	30	
Manganese	7.2	5	ug/L	7.6			5.3	29	
Molybdenum	1.0	1	ug/L	1.1			3.3	29	
Nickel	ND	1	ug/L	ND				29	
Selenium	ND	1	ug/L	ND				28	
Silver	ND	0.1	ug/L	ND				28	
Sodium	287000	20000	ug/L	296000			3.2	27	
Thallium	ND	0.1	ug/L	ND				27	
Vanadium	2.8	1	ug/L	2.7			3.5	27	
Zinc	ND	10	ug/L	ND				27	
Volatiles									
Benzene	ND	0.5	ug/L	ND				20	
Bromodichloromethane	ND	0.4	ug/L	ND				25	
Bromoform	ND	0.5	ug/L	ND				25	
Bromomethane	ND	0.7	ug/L	ND				25	
Carbon Tetrachloride	ND	0.5	ug/L	ND				25	
Chlorobenzene	ND	0.4	ug/L	ND				25	
Chloroethane	ND	1.0	ug/L	ND				25	
Chloroform	ND	0.5	ug/L	ND				19	
Chloromethane	ND	3.0	ug/L	ND				25	
Dibromochloromethane	ND	0.5	ug/L	ND				25	
1,2-Dibromoethane	ND	1.0	ug/L	ND				25	
1,2-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,3-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,4-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,1-Dichloroethane	ND	0.5	ug/L	ND				21	
1,2-Dichloroethane	ND	0.5	ug/L	ND				25	
1,1-Dichloroethylene	ND	0.5	ug/L	ND				21	
cis-1,2-Dichloroethylene	ND	0.4	ug/L	ND				20	
trans-1,2-Dichloroethylene	ND	1.0	ug/L	ND				25	
1,2-Dichloropropane	ND	0.5	ug/L	ND				25	
cis-1,3-Dichloropropylene	ND	0.4	ug/L	ND				25	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND				25	
Ethylbenzene	ND	0.5	ug/L	ND				35	
Methylene Chloride	ND	4.0	ug/L	ND				25	
Styrene	ND	0.4	ug/L	ND				25	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND				25	

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L	ND				25	
Tetrachloroethylene	ND	0.5	ug/L	ND				31	
Toluene	ND	0.5	ug/L	ND				30	
1,1,1-Trichloroethane	ND	0.4	ug/L	ND				25	
1,1,2-Trichloroethane	ND	0.6	ug/L	ND				25	
Trichloroethylene	ND	0.4	ug/L	ND				30	
Trichlorofluoromethane	ND	1.0	ug/L	ND				25	
1,3,5-Trimethylbenzene	ND	0.5	ug/L	ND				20	
Vinyl chloride	ND	0.4	ug/L	ND				25	
m,p-Xylenes	ND	0.5	ug/L	ND				34	
o-Xylene	ND	0.5	ug/L	ND				32	
Surrogate: 4-Bromofluorobenzene	*80.8*		*ug/L*	*ND*	*101*	*83-134*			
Surrogate: Dibromofluoromethane	*73.7*		*ug/L*	*ND*	*92.1*	*78-124*			
Surrogate: Toluene-d8	*82.1*		*ug/L*	*ND*	*103*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	2150	200	ug/L	ND	108	68-117			
F2 PHCs (C10-C16)	1290	100	ug/L	ND	80.5	61-129			
F3 PHCs (C16-C34)	4000	100	ug/L	ND	100	61-129			
F4 PHCs (C34-C50)	2420	100	ug/L	ND	101	61-129			
Metals									
Chromium (VI)	196	10	ug/L	ND	98.0	75-120			
Mercury	4.07	0.1	ug/L	ND	136	78-137			
Antimony	54.3		ug/L	1.10	106	78-126			
Arsenic	68.5		ug/L	0.3	136	83-119			QS-02
Barium	98.9		ug/L	46.9	104	83-116			
Beryllium	42.3		ug/L	0.008	84.5	72-132			
Boron	50		ug/L	12	74.7	71-128			
Cadmium	53.8		ug/L	ND	109	78-119			
Chromium	59.8		ug/L	5.4	109	80-124			
Cobalt	47.7		ug/L	0.02	95.4	78-125			
Copper	60.2		ug/L	16.3	87.6	75-123			
Iron	1400		ug/L	549	84.7	66-119			
Lead	49.9		ug/L	0.04	99.7	77-126			
Magnesium	3320		ug/L	2560	76.9	75-131			
Manganese	53.9		ug/L	7.6	92.7	79-123			
Molybdenum	58.6		ug/L	1.1	115	82-119			
Nickel	46.3		ug/L	0.4	91.7	78-119			
Selenium	51.2		ug/L	ND	102	81-125			
Silver	50.1		ug/L	0.08	100	70-128			
Sodium	1030		ug/L	ND	103	67-132			
Thallium	46.5		ug/L	ND	93.0	82-127			
Vanadium	54.7		ug/L	2.7	104	82-123			
Zinc	56		ug/L	8	96.1	78-130			
PCBs									
PCBs, total	0.742	0.05	ug/L	ND	74.2	54-137			
Surrogate: Decachlorobiphenyl	*0.389*		*ug/L*		*77.8*	*37-130*			
Semi-Volatiles									
Acenaphthene	4.01	0.05	ug/L	ND	80.2	32-116			
Acenaphthylene	4.27	0.05	ug/L	ND	85.4	26-120			
Anthracene	4.53	0.01	ug/L	ND	90.6	29-126			
Benzo[a]anthracene	5.12	0.01	ug/L	ND	102	29-126			
Benzo[a]pyrene	4.86	0.01	ug/L	ND	97.2	29-111			
Benzo[b]fluoranthene	5.44	0.05	ug/L	ND	109	26-111			
Benzo[g,h,i]perylene	4.41	0.05	ug/L	ND	88.2	23-128			
Benzo[k]fluoranthene	5.34	0.05	ug/L	ND	107	23-135			
Biphenyl	4.18	0.05	ug/L	ND	83.7	31-107			
Chrysene	5.55	0.05	ug/L	ND	111	29-137			
Dibenzo[a,h]anthracene	4.22	0.05	ug/L	ND	84.4	20-131			
Fluoranthene	4.48	0.01	ug/L	ND	89.7	24-131			
Fluorene	4.66	0.05	ug/L	ND	93.2	28-123			
Indeno[1,2,3-cd]pyrene	4.24	0.05	ug/L	ND	84.8	20-128			
1-Methylnaphthalene	3.38	0.05	ug/L	ND	67.6	25-127			
2-Methylnaphthalene	3.56	0.05	ug/L	ND	71.1	21-119			
Naphthalene	3.59	0.05	ug/L	ND	71.7	29-118			
Phenanthrene	4.60	0.05	ug/L	ND	91.9	34-108			
Pyrene	4.70	0.01	ug/L	ND	94.1	29-131			
Surrogate: 2-Fluorobiphenyl	*9.71*		*ug/L*		*48.6*	*31-154*			
Surrogate: Terphenyl-d14	*13.7*		*ug/L*		*68.4*	*37-156*			

PARACEL LABORATORIES LTD.

Order #: 0904143

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Volatiles									
Benzene	35.8	0.5	ug/L	ND	89.6	55-141			
Bromodichloromethane	36.6	0.4	ug/L	ND	91.4	52-139			
Bromoform	38.5	0.5	ug/L	ND	96.2	52-170			
Bromomethane	46.1	0.7	ug/L	ND	115	32-138			
Carbon Tetrachloride	37.2	0.5	ug/L	ND	93.0	49-149			
Chlorobenzene	37.6	0.4	ug/L	ND	93.9	64-137			
Chloroethane	38.3	1.0	ug/L	ND	95.8	39-152			
Chloroform	35.4	0.5	ug/L	ND	88.4	58-138			
Chloromethane	37.2	3.0	ug/L	ND	93.0	24-163			
Dibromochloromethane	39.7	0.5	ug/L	ND	99.3	61-153			
1,2-Dibromoethane	39.1	1.0	ug/L	ND	97.7	61-145			
1,2-Dichlorobenzene	35.4	0.4	ug/L	ND	88.5	60-150			
1,3-Dichlorobenzene	35.0	0.4	ug/L	ND	87.6	62-149			
1,4-Dichlorobenzene	35.8	0.4	ug/L	ND	89.5	63-132			
1,1-Dichloroethane	35.1	0.5	ug/L	ND	87.6	51-156			
1,2-Dichloroethane	37.0	0.5	ug/L	ND	92.5	50-140			
1,1-Dichloroethylene	38.0	0.5	ug/L	ND	95.0	43-153			
cis-1,2-Dichloroethylene	35.8	0.4	ug/L	ND	89.5	58-145			
trans-1,2-Dichloroethylene	36.3	1.0	ug/L	ND	90.7	51-145			
1,2-Dichloropropane	36.4	0.5	ug/L	ND	91.1	56-136			
cis-1,3-Dichloropropylene	38.0	0.4	ug/L	ND	95.0	54-141			
trans-1,3-Dichloropropylene	43.5	0.5	ug/L	ND	109	61-140			
Ethylbenzene	39.6	0.5	ug/L	ND	98.9	61-139			
Methylene Chloride	36.2	4.0	ug/L	ND	90.5	58-149			
Styrene	39.5	0.4	ug/L	ND	98.8	63-143			
1,1,1,2-Tetrachloroethane	39.2	0.5	ug/L	ND	98.0	61-148			
1,1,2,2-Tetrachloroethane	47.6	0.6	ug/L	ND	119	50-157			
Tetrachloroethylene	38.0	0.5	ug/L	ND	94.9	51-145			
Toluene	36.3	0.5	ug/L	ND	90.7	54-136			
1,1,1-Trichloroethane	36.5	0.4	ug/L	ND	91.2	55-140			
1,1,2-Trichloroethane	38.6	0.6	ug/L	ND	96.6	63-144			
Trichloroethylene	37.5	0.4	ug/L	ND	93.8	52-135			
Trichlorofluoromethane	41.6	1.0	ug/L	ND	104	37-155			
1,3,5-Trimethylbenzene	35.6	0.5	ug/L	ND	88.9	61-151			
Vinyl chloride	39.2	0.4	ug/L	ND	98.0	31-159			
m,p-Xylenes	78.0	0.5	ug/L	ND	97.5	61-139			
o-Xylene	39.3	0.5	ug/L	ND	98.2	60-142			
Surrogate: 4-Bromofluorobenzene	*78.8*		*ug/L*		*98.5*	*83-134*			
Surrogate: Dibromofluoromethane	*78.8*		*ug/L*		*98.4*	*78-124*			
Surrogate: Toluene-d8	*85.9*		*ug/L*		*107*	*76-118*			

Certificate of Analysis

Report Date: 28-Jan-2009
Order Date:23-Jan-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QS-02 : Spike level outside of control limits. Analysis batch accepted based on other QC included in the batch.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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300-2319 St. Laurent Blvd.
Ottawa, Ontario K1G 4J8
p: 1-800-749-1947
e: paracel@paracellabs.com
www.paracellabs.com

Chain of Custody Record
№ 55099
Pg. 1 of 1

Company Name: Trow
Contact Name: Mark McCalla
Address: 154 Colonnade
Tel: 613-225-9940 Cell:
Email:

Project Ref: OTEW00019406P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [✓] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 090143	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1 to F4)	PAH	PCB	VOC	Metals									Hazardous? (Y/N)
1	MW09-1	GW		6	Jan 22/09	X	X	X	X	X									
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: 23 Jan 09 Time:	Date: Time:	Date: Jan 23/09 Time: 8:41	Date: Jan 23/09 Time: 9:13

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 56646

Report Date: 11-Mar-2009
Order Date: 5-Mar-2009
Revised Report **Order #: 0910128**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0910128-02	MW09-20
0910128-03	MW09-21
0910128-04	MW09-22
0910128-05	MW09-23
0910128-06	MW09-24
0910128-07	MW09-25
0910128-08	MW09-220

Approved By:

Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
CCME PHC F1	CWS Tier 1 - P&T GC-FID	6-Mar-09	7-Mar-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	6-Mar-09	6-Mar-09
Chromium, hexavalent	MOE E3056 - colourimetric	6-Mar-09	6-Mar-09
Mercury	EPA 245.1 - Cold Vapour AA	9-Mar-09	9-Mar-09
Metals	EPA 200.8 - ICP-MS	6-Mar-09	6-Mar-09
PAHs by GC-MS, standard scan	EPA 625 - GC-MS, extraction	9-Mar-09	10-Mar-09
PCBs, total	EPA 608 - GC-ECD	10-Mar-09	10-Mar-09
VOCs	EPA 624 - P&T GC-MS	6-Mar-09	7-Mar-09

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-20	MW09-21	MW09-22	MW09-23
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
	Sample ID:	0910128-02	0910128-03	0910128-04	0910128-05
	MDL/Units	Water	Water	Water	Water
Metals					
Antimony	1 ug/L	<1	<1	<1	<1
Arsenic	10 ug/L	<10	<10	<10	<10
Barium	10 ug/L	14	96	<10	17
Beryllium	1 ug/L	<1	<1	<1	<1
Boron	50 ug/L	<50	<50	<50	<50
Cadmium	1 ug/L	<1	<1	<1	<1
Chromium	50 ug/L	<50	<50	<50	<50
Chromium (VI)	10 ug/L	<10	<10	<10	<10
Cobalt	5 ug/L	<5	<5	<5	<5
Copper	5 ug/L	<5	7	<5	6
Lead	1 ug/L	<1	4	<1	<1
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1
Molybdenum	5 ug/L	<5	5	<5	<5
Nickel	5 ug/L	<5	8	<5	<5
Selenium	5 ug/L	<5	<5	<5	<5
Silver	1 ug/L	<1	<1	<1	<1
Sodium	200 ug/L	6180	13400	5580	8760
Thallium	1 ug/L	<1	<1	<1	<1
Vanadium	10 ug/L	<10	<10	<10	<10
Zinc	20 ug/L	<20	<20	<20	<20
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	<0.7
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	<3.0
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-20	MW09-21	MW09-22	MW09-23
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
	Sample ID:	0910128-02	0910128-03	0910128-04	0910128-05
	MDL/Units	Water	Water	Water	Water
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.5 ug/L	<0.5	1.4	<0.5	<0.5
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	<4.0
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	0.5 ug/L	<0.5	5.9	0.5	<0.5
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	<0.6
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	0.5 ug/L	0.8	<0.5	<0.5	<0.5
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	<0.4
m,p-Xylenes	0.5 ug/L	1.0	1.0	0.9	<0.5
o-Xylene	0.5 ug/L	<0.5	0.5	<0.5	<0.5
4-Bromofluorobenzene	Surrogate	104%	106%	105%	102%
Dibromofluoromethane	Surrogate	84.4%	88.0%	87.0%	79.3%
Toluene-d8	Surrogate	114%	113%	115%	113%

Hydrocarbons

F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	<200

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-20	MW09-21	MW09-22	MW09-23
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	05-Mar-09
	Sample ID:	0910128-02	0910128-03	0910128-04	0910128-05
	MDL/Units	Water	Water	Water	Water
F2 PHCs (C10-C16)	100 ug/L	1740	424	86300	<100
F3 PHCs (C16-C34)	100 ug/L	421	<100	11400	<100
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	<100
Semi-Volatiles					
Acenaphthene	0.05 ug/L	0.96	0.27	0.69	0.08
Acenaphthylene	0.05 ug/L	0.25	0.15	0.72	0.29
Anthracene	0.01 ug/L	0.09	0.23	0.60	0.27
Benzo[a]anthracene	0.01 ug/L	0.17	0.30	0.94	1.10
Benzo[a]pyrene	0.01 ug/L	0.14	0.24	0.97	1.12
Benzo[b]fluoranthene	0.05 ug/L	0.25	0.33	1.51	1.69
Benzo[g,h,i]perylene	0.05 ug/L	0.14	0.16	0.75	0.82
Benzo[k]fluoranthene	0.05 ug/L	0.09	0.19	0.72	0.65
Biphenyl	0.05 ug/L	0.15	0.10	0.14	<0.05
Chrysene	0.05 ug/L	0.19	0.31	1.13	1.20
Dibenzo[a,h]anthracene	0.05 ug/L	<0.05	<0.05	0.07	0.07
Fluoranthene	0.01 ug/L	0.28	0.55	1.80	1.16
Fluorene	0.05 ug/L	1.44	0.26	1.20	0.06
Indeno[1,2,3-cd]pyrene	0.05 ug/L	0.09	0.13	0.61	0.49
1-Methylnaphthalene	0.05 ug/L	18.3	0.41	5.05	<0.05
2-Methylnaphthalene	0.05 ug/L	7.39	0.39	0.85	0.05
Naphthalene	0.05 ug/L	5.26	0.58	1.00	0.08
Phenanthrene	0.05 ug/L	0.64	0.83	1.89	0.52
Pyrene	0.01 ug/L	0.31	0.51	1.65	1.09
2-Fluorobiphenyl	Surrogate	94.4%	96.3%	90.3%	64.9%
Terphenyl-d14	Surrogate	92.0%	93.5%	88.7%	71.7%
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	<0.05
Decachlorobiphenyl	Surrogate	90.4%	91.2%	94.5%	66.7%

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-24	MW09-25	MW09-220	-
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	-
	Sample ID:	0910128-06	0910128-07	0910128-08	-
	MDL/Units	Water	Water	Water	-
Metals					
Antimony	1 ug/L	<1	<1	<1	-
Arsenic	10 ug/L	<10	<10	<10	-
Barium	10 ug/L	11	<10	<10	-
Beryllium	1 ug/L	<1	<1	<1	-
Boron	50 ug/L	<50	<50	<50	-
Cadmium	1 ug/L	<1	<1	<1	-
Chromium	50 ug/L	<50	<50	<50	-
Chromium (VI)	10 ug/L	<10	<10	<10	-
Cobalt	5 ug/L	<5	<5	<5	-
Copper	5 ug/L	6	7	<5	-
Lead	1 ug/L	<1	<1	<1	-
Mercury	0.1 ug/L	<0.1	<0.1	<0.1	-
Molybdenum	5 ug/L	<5	<5	<5	-
Nickel	5 ug/L	<5	<5	<5	-
Selenium	5 ug/L	<5	<5	<5	-
Silver	1 ug/L	<1	<1	<1	-
Sodium	200 ug/L	6270	7380	5070	-
Thallium	1 ug/L	<1	<1	<1	-
Vanadium	10 ug/L	<10	<10	<10	-
Zinc	20 ug/L	<20	<20	<20	-
Volatiles					
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromodichloromethane	0.4 ug/L	<0.4	<0.4	<0.4	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromomethane	0.7 ug/L	<0.7	<0.7	<0.7	-
Carbon Tetrachloride	0.5 ug/L	<0.5	<0.5	<0.5	-
Chlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
Chloroethane	1.0 ug/L	<1.0	<1.0	<1.0	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	-
Chloromethane	3.0 ug/L	<3.0	<3.0	<3.0	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-24	MW09-25	MW09-220	-
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	-
	Sample ID:	0910128-06	0910128-07	0910128-08	-
	MDL/Units	Water	Water	Water	-
1,2-Dibromoethane	1.0 ug/L	<1.0	<1.0	<1.0	-
1,2-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,3-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,4-Dichlorobenzene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	-
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	<1.0	<1.0	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	<0.4	<0.4	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Methylene Chloride	4.0 ug/L	<4.0	<4.0	<4.0	-
Styrene	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	<0.6	<0.6	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,1-Trichloroethane	0.4 ug/L	<0.4	<0.4	<0.4	-
1,1,2-Trichloroethane	0.6 ug/L	<0.6	<0.6	<0.6	-
Trichloroethylene	0.4 ug/L	<0.4	<0.4	<0.4	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-
1,3,5-Trimethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Vinyl chloride	0.4 ug/L	<0.4	<0.4	<0.4	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	-
4-Bromofluorobenzene	Surrogate	105%	104%	104%	-
Dibromofluoromethane	Surrogate	91.2%	81.5%	85.3%	-
Toluene-d8	Surrogate	114%	114%	115%	-
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	<200	<200	<200	-

PARACEL LABORATORIES LTD.

Order #: 0910128

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-24	MW09-25	MW09-220	-
	Sample Date:	05-Mar-09	05-Mar-09	05-Mar-09	-
	Sample ID:	0910128-06	0910128-07	0910128-08	-
	MDL/Units	Water	Water	Water	-
F2 PHCs (C10-C16)	100 ug/L	<100	960	69900	-
F3 PHCs (C16-C34)	100 ug/L	<100	221	9570	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	-
Semi-Volatiles					
Acenaphthene	0.05 ug/L	1.68	0.23	0.66	-
Acenaphthylene	0.05 ug/L	0.26	0.12	0.48	-
Anthracene	0.01 ug/L	1.74	0.09	0.43	-
Benzo[a]anthracene	0.01 ug/L	2.27	0.26	0.59	-
Benzo[a]pyrene	0.01 ug/L	2.00	0.24	0.61	-
Benzo[b]fluoranthene	0.05 ug/L	2.62	0.36	0.88	-
Benzo[g,h,i]perylene	0.05 ug/L	1.10	0.18	0.48	-
Benzo[k]fluoranthene	0.05 ug/L	1.34	0.18	0.30	-
Biphenyl	0.05 ug/L	0.24	<0.05	<0.05	-
Chrysene	0.05 ug/L	2.61	0.31	0.73	-
Dibenzo[a,h]anthracene	0.05 ug/L	0.20	<0.05	0.08	-
Fluoranthene	0.01 ug/L	4.43	0.42	1.23	-
Fluorene	0.05 ug/L	1.28	0.13	1.07	-
Indeno[1,2,3-cd]pyrene	0.05 ug/L	0.88	0.13	0.38	-
1-Methylnaphthalene	0.05 ug/L	1.01	0.65	5.29	-
2-Methylnaphthalene	0.05 ug/L	1.10	0.15	0.75	-
Naphthalene	0.05 ug/L	2.68	0.29	0.94	-
Phenanthrene	0.05 ug/L	5.89	0.34	1.51	-
Pyrene	0.01 ug/L	4.18	0.39	1.09	-
2-Fluorobiphenyl	Surrogate	79.1%	77.0%	77.3%	-
Terphenyl-d14	Surrogate	81.4%	87.1%	80.6%	-
PCBs					
PCBs, total	0.05 ug/L	<0.05	<0.05	<0.05	-
Decachlorobiphenyl	Surrogate	85.6%	74.6%	79.2%	-

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Metals									
Antimony	ND	1	ug/L						
Arsenic	ND	10	ug/L						
Barium	ND	10	ug/L						
Beryllium	ND	1	ug/L						
Boron	ND	50	ug/L						
Cadmium	ND	1	ug/L						
Chromium (VI)	ND	10	ug/L						
Chromium	ND	50	ug/L						
Cobalt	ND	5	ug/L						
Copper	ND	5	ug/L						
Lead	ND	1	ug/L						
Mercury	ND	0.1	ug/L						
Molybdenum	ND	5	ug/L						
Nickel	ND	5	ug/L						
Selenium	ND	5	ug/L						
Silver	ND	1	ug/L						
Sodium	ND	200	ug/L						
Thallium	ND	1	ug/L						
Vanadium	ND	10	ug/L						
Zinc	ND	20	ug/L						
PCBs									
PCBs, total	ND	0.05	ug/L						
Surrogate: Decachlorobiphenyl	*0.480*		*ug/L*		*96.0*	*37-130*			
Semi-Volatiles									
Acenaphthene	ND	0.05	ug/L						
Acenaphthylene	ND	0.05	ug/L						
Anthracene	ND	0.01	ug/L						
Benzo[a]anthracene	ND	0.01	ug/L						
Benzo[a]pyrene	ND	0.01	ug/L						
Benzo[b]fluoranthene	ND	0.05	ug/L						
Benzo[g,h,i]perylene	ND	0.05	ug/L						
Benzo[k]fluoranthene	ND	0.05	ug/L						
Biphenyl	ND	0.05	ug/L						
Chrysene	ND	0.05	ug/L						
Dibenzo[a,h]anthracene	ND	0.05	ug/L						
Fluoranthene	ND	0.01	ug/L						
Fluorene	ND	0.05	ug/L						
Indeno[1,2,3-cd]pyrene	ND	0.05	ug/L						
1-Methylnaphthalene	ND	0.05	ug/L						
2-Methylnaphthalene	ND	0.05	ug/L						
Naphthalene	ND	0.05	ug/L						
Phenanthrene	ND	0.05	ug/L						
Pyrene	ND	0.01	ug/L						
Surrogate: 2-Fluorobiphenyl	*10.2*		*ug/L*		*50.9*	*31-154*			
Surrogate: Terphenyl-d14	*17.1*		*ug/L*		*85.5*	*37-156*			
Volatiles									
Benzene	ND	0.5	ug/L						

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	ND	0.4	ug/L						
Bromoform	ND	0.5	ug/L						
Bromomethane	ND	0.7	ug/L						
Carbon Tetrachloride	ND	0.5	ug/L						
Chlorobenzene	ND	0.4	ug/L						
Chloroethane	ND	1.0	ug/L						
Chloroform	ND	0.5	ug/L						
Chloromethane	ND	3.0	ug/L						
Dibromochloromethane	ND	0.5	ug/L						
1,2-Dibromoethane	ND	1.0	ug/L						
1,2-Dichlorobenzene	ND	0.4	ug/L						
1,3-Dichlorobenzene	ND	0.4	ug/L						
1,4-Dichlorobenzene	ND	0.4	ug/L						
1,1-Dichloroethane	ND	0.5	ug/L						
1,2-Dichloroethane	ND	0.5	ug/L						
1,1-Dichloroethylene	ND	0.5	ug/L						
cis-1,2-Dichloroethylene	ND	0.4	ug/L						
trans-1,2-Dichloroethylene	ND	1.0	ug/L						
1,2-Dichloropropane	ND	0.5	ug/L						
cis-1,3-Dichloropropylene	ND	0.4	ug/L						
trans-1,3-Dichloropropylene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Methylene Chloride	ND	4.0	ug/L						
Styrene	ND	0.4	ug/L						
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L						
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L						
Tetrachloroethylene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
1,1,1-Trichloroethane	ND	0.4	ug/L						
1,1,2-Trichloroethane	ND	0.6	ug/L						
Trichloroethylene	ND	0.4	ug/L						
Trichlorofluoromethane	ND	1.0	ug/L						
1,3,5-Trimethylbenzene	ND	0.5	ug/L						
Vinyl chloride	ND	0.4	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Surrogate: 4-Bromofluorobenzene	*86.6*		*ug/L*		*108*	*83-134*			
Surrogate: Dibromofluoromethane	*62.9*		*ug/L*		*78.7*	*78-124*			
Surrogate: Toluene-d8	*80.7*		*ug/L*		*101*	*76-118*			

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L	ND				32	
Metals									
Antimony	6.2	1	ug/L	7.6			19.9	26	
Arsenic	ND	10	ug/L	ND				29	
Barium	637	10	ug/L	634			0.5	34	
Beryllium	ND	1	ug/L	ND				25	
Boron	59.9	50	ug/L	59.4			1.0	33	
Cadmium	ND	1	ug/L	ND				33	
Chromium (VI)	ND	10	ug/L	ND				13	
Chromium	ND	50	ug/L	ND				32	
Cobalt	8.3	5	ug/L	7.5			9.8	32	
Copper	19.9	5	ug/L	20.2			1.6	32	
Lead	ND	1	ug/L	ND				32	
Mercury	ND	0.1	ug/L	ND				20	
Molybdenum	12.7	5	ug/L	13.1			3.0	29	
Nickel	36.8	5	ug/L	38.7			4.9	29	
Selenium	5.0	5	ug/L	6.0			200.0	28	QR-01
Silver	ND	1	ug/L	ND				28	
Sodium	1880000	20000	ug/L	1730000			7.9	27	
Thallium	ND	1	ug/L	ND				27	
Vanadium	ND	10	ug/L	ND				27	
Zinc	25.5	20	ug/L	26.3			3.0	27	
Volatiles									
Benzene	ND	0.5	ug/L	ND				20	
Bromodichloromethane	ND	0.4	ug/L	ND				25	
Bromoform	ND	0.5	ug/L	ND				25	
Bromomethane	ND	0.7	ug/L	ND				25	
Carbon Tetrachloride	ND	0.5	ug/L	ND				25	
Chlorobenzene	ND	0.4	ug/L	ND				25	
Chloroethane	ND	1.0	ug/L	ND				25	
Chloroform	ND	0.5	ug/L	ND				19	
Chloromethane	ND	3.0	ug/L	ND				25	
Dibromochloromethane	ND	0.5	ug/L	ND				25	
1,2-Dibromoethane	ND	1.0	ug/L	ND				25	
1,2-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,3-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,4-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,1-Dichloroethane	ND	0.5	ug/L	ND				21	
1,2-Dichloroethane	ND	0.5	ug/L	ND				25	
1,1-Dichloroethylene	ND	0.5	ug/L	ND				21	
cis-1,2-Dichloroethylene	ND	0.4	ug/L	ND				20	
trans-1,2-Dichloroethylene	ND	1.0	ug/L	ND				25	
1,2-Dichloropropane	ND	0.5	ug/L	ND				25	
cis-1,3-Dichloropropylene	ND	0.4	ug/L	ND				25	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND				25	
Ethylbenzene	ND	0.5	ug/L	ND				35	
Methylene Chloride	ND	4.0	ug/L	ND				25	
Styrene	ND	0.4	ug/L	ND				25	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND				25	
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L	ND				25	
Tetrachloroethylene	ND	0.5	ug/L	ND				31	
Toluene	ND	0.5	ug/L	ND				30	

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	ND	0.4	ug/L	ND				25	
1,1,2-Trichloroethane	ND	0.6	ug/L	ND				25	
Trichloroethylene	ND	0.4	ug/L	ND				30	
Trichlorofluoromethane	ND	1.0	ug/L	ND				25	
1,3,5-Trimethylbenzene	ND	0.5	ug/L	ND				20	
Vinyl chloride	ND	0.4	ug/L	ND				25	
m,p-Xylenes	ND	0.5	ug/L	ND				34	
o-Xylene	ND	0.5	ug/L	ND				32	
Surrogate: 4-Bromofluorobenzene	*84.0*		*ug/L*	*ND*	*105*	*83-134*			
Surrogate: Dibromofluoromethane	*70.8*		*ug/L*	*ND*	*88.5*	*78-124*			
Surrogate: Toluene-d8	*92.2*		*ug/L*	*ND*	*115*	*76-118*			

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	2160	200	ug/L	ND	108	68-117			
F2 PHCs (C10-C16)	1150	100	ug/L	ND	71.7	61-129			
F3 PHCs (C16-C34)	3350	100	ug/L	ND	83.8	61-129			
F4 PHCs (C34-C50)	2260	100	ug/L	ND	94.2	61-129			
Metals									
Antimony	48.9		ug/L	0.8	96.2	78-126			
Arsenic	49.5		ug/L	0.2	98.5	83-119			
Barium	113		ug/L	63.4	98.9	83-116			
Beryllium	46.4		ug/L	0.003	92.9	72-132			
Boron	52.0		ug/L	5.9	92.1	71-128			
Cadmium	47.8		ug/L	ND	96.2	78-119			
Chromium (VI)	206	10	ug/L	ND	103	75-120			
Chromium	48.4		ug/L	0.9	95.1	80-124			
Cobalt	48.3		ug/L	0.8	95.1	78-125			
Copper	45.8		ug/L	2.0	87.6	75-123			
Lead	47.3		ug/L	ND	94.7	77-126			
Mercury	3.20	0.1	ug/L	ND	107	78-137			
Molybdenum	53.5		ug/L	1.3	104	82-119			
Nickel	49.8		ug/L	3.9	91.9	78-119			
Selenium	47.0		ug/L	0.6	92.8	81-125			
Silver	45.2		ug/L	ND	90.4	70-128			
Sodium	1010		ug/L	ND	101	68-132			
Thallium	50.3		ug/L	ND	101	82-127			
Vanadium	48.8		ug/L	ND	97.8	82-123			
Zinc	45.5		ug/L	2.6	85.8	78-130			
PCBs									
PCBs, total	1.14	0.05	ug/L	ND	114	54-137			
Surrogate: Decachlorobiphenyl	*0.489*		*ug/L*		*97.8*	*37-130*			
Semi-Volatiles									
Acenaphthene	4.11	0.05	ug/L	ND	82.2	32-116			
Acenaphthylene	4.04	0.05	ug/L	ND	80.8	26-120			
Anthracene	4.56	0.01	ug/L	ND	91.3	29-126			
Benzo[a]anthracene	4.58	0.01	ug/L	ND	91.5	29-126			
Benzo[a]pyrene	4.47	0.01	ug/L	ND	89.5	29-111			
Benzo[b]fluoranthene	4.79	0.05	ug/L	ND	95.7	26-111			
Benzo[g,h,i]perylene	3.57	0.05	ug/L	ND	71.5	23-128			
Benzo[k]fluoranthene	4.52	0.05	ug/L	ND	90.5	23-135			
Biphenyl	5.21	0.05	ug/L	ND	104	31-107			
Chrysene	4.88	0.05	ug/L	ND	97.6	29-137			
Dibenzo[a,h]anthracene	3.67	0.05	ug/L	ND	73.4	20-131			
Fluoranthene	4.06	0.01	ug/L	ND	81.2	24-131			
Fluorene	4.46	0.05	ug/L	ND	89.3	28-123			
Indeno[1,2,3-cd]pyrene	3.52	0.05	ug/L	ND	70.4	20-128			
1-Methylnaphthalene	3.44	0.05	ug/L	ND	68.8	25-127			
2-Methylnaphthalene	3.78	0.05	ug/L	ND	75.5	21-119			
Naphthalene	4.06	0.05	ug/L	ND	81.2	29-118			
Phenanthrene	4.20	0.05	ug/L	ND	84.0	34-108			
Pyrene	4.32	0.01	ug/L	ND	86.4	29-131			
Surrogate: 2-Fluorobiphenyl	*11.0*		*ug/L*		*55.2*	*31-154*			
Surrogate: Terphenyl-d14	*16.2*		*ug/L*		*80.9*	*37-156*			
Volatiles									
Benzene	35.7	0.5	ug/L	ND	89.4	55-141			

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	34.0	0.4	ug/L	ND	84.9	52-139			
Bromoform	37.8	0.5	ug/L	ND	94.4	52-170			
Bromomethane	28.0	0.7	ug/L	ND	70.0	32-138			
Carbon Tetrachloride	36.7	0.5	ug/L	ND	91.7	49-149			
Chlorobenzene	40.1	0.4	ug/L	ND	100	64-137			
Chloroethane	39.1	1.0	ug/L	ND	97.7	39-152			
Chloroform	36.3	0.5	ug/L	ND	90.8	58-138			
Chloromethane	28.1	3.0	ug/L	ND	70.3	24-163			
Dibromochloromethane	37.2	0.5	ug/L	ND	92.9	61-153			
1,2-Dibromoethane	37.2	1.0	ug/L	ND	93.1	61-145			
1,2-Dichlorobenzene	35.0	0.4	ug/L	ND	87.4	60-150			
1,3-Dichlorobenzene	34.1	0.4	ug/L	ND	85.3	62-149			
1,4-Dichlorobenzene	35.2	0.4	ug/L	ND	87.9	63-132			
1,1-Dichloroethane	33.8	0.5	ug/L	ND	84.6	51-156			
1,2-Dichloroethane	39.6	0.5	ug/L	ND	98.9	50-140			
1,1-Dichloroethylene	32.7	0.5	ug/L	ND	81.6	43-153			
cis-1,2-Dichloroethylene	33.3	0.4	ug/L	ND	83.3	58-145			
trans-1,2-Dichloroethylene	34.8	1.0	ug/L	ND	87.1	51-145			
1,2-Dichloropropane	35.4	0.5	ug/L	ND	88.6	56-136			
cis-1,3-Dichloropropylene	36.3	0.4	ug/L	ND	90.8	54-141			
trans-1,3-Dichloropropylene	42.7	0.5	ug/L	ND	107	61-140			
Ethylbenzene	37.4	0.5	ug/L	ND	93.4	61-139			
Methylene Chloride	31.6	4.0	ug/L	ND	79.0	58-149			
Styrene	39.8	0.4	ug/L	ND	99.5	63-143			
1,1,1,2-Tetrachloroethane	40.4	0.5	ug/L	ND	101	61-148			
1,1,2,2-Tetrachloroethane	47.1	0.6	ug/L	ND	118	50-157			
Tetrachloroethylene	36.9	0.5	ug/L	ND	92.2	51-145			
Toluene	32.8	0.5	ug/L	ND	82.1	54-136			
1,1,1-Trichloroethane	37.2	0.4	ug/L	ND	93.0	55-140			
1,1,2-Trichloroethane	35.0	0.6	ug/L	ND	87.5	63-144			
Trichloroethylene	34.0	0.4	ug/L	ND	85.0	52-135			
Trichlorofluoromethane	39.7	1.0	ug/L	ND	99.2	37-155			
1,3,5-Trimethylbenzene	35.0	0.5	ug/L	ND	87.6	61-151			
Vinyl chloride	27.7	0.4	ug/L	ND	69.3	31-159			
m,p-Xylenes	75.9	0.5	ug/L	ND	94.9	61-139			
o-Xylene	40.0	0.5	ug/L	ND	99.9	60-142			
Surrogate: 4-Bromofluorobenzene	*75.3*		*ug/L*		*94.1*	*83-134*			
Surrogate: Dibromofluoromethane	*88.3*		*ug/L*		*110*	*78-124*			
Surrogate: Toluene-d8	*73.3*		*ug/L*		*91.7*	*76-118*			

Certificate of Analysis

Report Date: 11-Mar-2009
Order Date:5-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample and QC Qualifiers Notes

1- QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Chain of Custody Record
№ 56646
Pg. 1 of 1

Company Name: TROW Associates
Contact Name: Mark McCalla
Address: 154 Colonnade Rd. Nepean
Tel: 613-225-9940 Cell:
Email: mark.mccalla@trow.com

Project Ref: OTEN00194061
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [✓] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 09/0128	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1-F4)	VOC	BTEX	Metals	PCB	PAH								Hazardous? (Y/N)
1	MW 09-18	GW		4	5/3/09	X	X	X			X								
2	MW 09-20			6		X	X	X	X	X	X								
3	MW 09-21			6															
4	MW 09-22			6															
5	MW09-23			6															
6	MW09-24			6															
7	MW09-25			6															
8	MW09-220			6															
9																			
10																			

Comments: For MW09-18 analyse for what is possible with quantities in bottles. Extra set of samples MW09-220. Client called to continue with the analysis of MW09-220. Sub-sampled for Cr6.

Relinquished By: Darrah Lafrance Date: 5/3/09 Time: 5:00 pm	Received at Depot: Date: Time:	Received at Lab: Date: Mar 5/09 Time: 4:56	Verified By: Date: Time:

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy

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Certificate of Analysis

Trow Associates Inc. (Ottawa)
154 Colonnade Rd. S
Ottawa, ON K2E 7J5
Attn: Mark McCalla

Phone: (613) 225-9940
Fax: (613) 225-7337

Client PO:
Project: OTEN00019406P
Custody: 56696

Report Date: 12-Mar-2009
Order Date: 6-Mar-2009

Order #: 0910147

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
0910147-01	MW09-18

Approved By: Mark Foto

Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
CCME PHC F1	CWS Tier 1 - P&T GC-FID	10-Mar-09	10-Mar-09
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	9-Mar-09	10-Mar-09
VOCs	EPA 624 - P&T GC-MS	10-Mar-09	10-Mar-09

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-18	-	-	-
	Sample Date:	06-Mar-09	-	-	-
	Sample ID:	0910147-01	-	-	-
	MDL/Units	Water	-	-	-
Volatiles					
Benzene	0.5 ug/L	34.1	-	-	-
Bromodichloromethane	0.4 ug/L	<0.4	-	-	-
Bromoform	0.5 ug/L	<0.5	-	-	-
Bromomethane	0.7 ug/L	<0.7	-	-	-
Carbon Tetrachloride	0.5 ug/L	<0.5	-	-	-
Chlorobenzene	0.4 ug/L	0.7	-	-	-
Chloroethane	1.0 ug/L	<1.0	-	-	-
Chloroform	0.5 ug/L	<0.5	-	-	-
Chloromethane	3.0 ug/L	<3.0	-	-	-
Dibromochloromethane	0.5 ug/L	<0.5	-	-	-
1,2-Dibromoethane	1.0 ug/L	<1.0	-	-	-
1,2-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,3-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,4-Dichlorobenzene	0.4 ug/L	<0.4	-	-	-
1,1-Dichloroethane	0.5 ug/L	<0.5	-	-	-
1,2-Dichloroethane	0.5 ug/L	<0.5	-	-	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	-	-	-
cis-1,2-Dichloroethylene	0.4 ug/L	<0.4	-	-	-
trans-1,2-Dichloroethylene	1.0 ug/L	<1.0	-	-	-
1,2-Dichloropropane	0.5 ug/L	<0.5	-	-	-
cis-1,3-Dichloropropylene	0.4 ug/L	<0.4	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	-	-	-
Ethylbenzene	0.5 ug/L	30.1	-	-	-
Methylene Chloride	4.0 ug/L	<4.0	-	-	-
Styrene	0.4 ug/L	<0.4	-	-	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	-	-	-
1,1,2,2-Tetrachloroethane	0.6 ug/L	<0.6	-	-	-
Tetrachloroethylene	0.5 ug/L	<0.5	-	-	-
Toluene	0.5 ug/L	50.9	-	-	-
1,1,1-Trichloroethane	0.4 ug/L	<0.4	-	-	-
1,1,2-Trichloroethane	0.6 ug/L	<0.6	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

	Client ID:	MW09-18	-	-	-
	Sample Date:	06-Mar-09	-	-	-
	Sample ID:	0910147-01	-	-	-
	MDL/Units	Water	-	-	-
Trichloroethylene	0.4 ug/L	<0.4	-	-	-
Trichlorofluoromethane	1.0 ug/L	<1.0	-	-	-
1,3,5-Trimethylbenzene	0.5 ug/L	3.8	-	-	-
Vinyl chloride	0.4 ug/L	<0.4	-	-	-
m,p-Xylenes	0.5 ug/L	96.3	-	-	-
o-Xylene	0.5 ug/L	15.9	-	-	-
4-Bromofluorobenzene	Surrogate	89.8%	-	-	-
Dibromofluoromethane	Surrogate	104%	-	-	-
Toluene-d8	Surrogate	108%	-	-	-
Hydrocarbons					
F1 PHCs (C6-C10)	200 ug/L	280	-	-	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	-	-
F3 PHCs (C16-C34)	100 ug/L	<100	-	-	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	-	-

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Volatiles									
Benzene	ND	0.5	ug/L						
Bromodichloromethane	ND	0.4	ug/L						
Bromoform	ND	0.5	ug/L						
Bromomethane	ND	0.7	ug/L						
Carbon Tetrachloride	ND	0.5	ug/L						
Chlorobenzene	ND	0.4	ug/L						
Chloroethane	ND	1.0	ug/L						
Chloroform	ND	0.5	ug/L						
Chloromethane	ND	3.0	ug/L						
Dibromochloromethane	ND	0.5	ug/L						
1,2-Dibromoethane	ND	1.0	ug/L						
1,2-Dichlorobenzene	ND	0.4	ug/L						
1,3-Dichlorobenzene	ND	0.4	ug/L						
1,4-Dichlorobenzene	ND	0.4	ug/L						
1,1-Dichloroethane	ND	0.5	ug/L						
1,2-Dichloroethane	ND	0.5	ug/L						
1,1-Dichloroethylene	ND	0.5	ug/L						
cis-1,2-Dichloroethylene	ND	0.4	ug/L						
trans-1,2-Dichloroethylene	ND	1.0	ug/L						
1,2-Dichloropropane	ND	0.5	ug/L						
cis-1,3-Dichloropropylene	ND	0.4	ug/L						
trans-1,3-Dichloropropylene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Methylene Chloride	ND	4.0	ug/L						
Styrene	ND	0.4	ug/L						
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L						
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L						
Tetrachloroethylene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
1,1,1-Trichloroethane	ND	0.4	ug/L						
1,1,2-Trichloroethane	ND	0.6	ug/L						
Trichloroethylene	ND	0.4	ug/L						
Trichlorofluoromethane	ND	1.0	ug/L						
1,3,5-Trimethylbenzene	ND	0.5	ug/L						
Vinyl chloride	ND	0.4	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Surrogate: 4-Bromofluorobenzene	*73.5*		*ug/L*		*91.8*	*83-134*			
Surrogate: Dibromofluoromethane	*78.0*		*ug/L*		*97.5*	*78-124*			
Surrogate: Toluene-d8	*78.2*		*ug/L*		*97.8*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	200	ug/L	ND				32	
Volatiles									
Benzene	ND	0.5	ug/L	ND				20	
Bromodichloromethane	ND	0.4	ug/L	ND				25	
Bromoform	ND	0.5	ug/L	ND				25	
Bromomethane	ND	0.7	ug/L	ND				25	
Carbon Tetrachloride	ND	0.5	ug/L	ND				25	
Chlorobenzene	ND	0.4	ug/L	ND				25	
Chloroethane	ND	1.0	ug/L	ND				25	
Chloroform	ND	0.5	ug/L	ND				19	
Chloromethane	ND	3.0	ug/L	ND				25	
Dibromochloromethane	ND	0.5	ug/L	ND				25	
1,2-Dibromoethane	ND	1.0	ug/L	ND				25	
1,2-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,3-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,4-Dichlorobenzene	ND	0.4	ug/L	ND				25	
1,1-Dichloroethane	ND	0.5	ug/L	ND				21	
1,2-Dichloroethane	ND	0.5	ug/L	ND				25	
1,1-Dichloroethylene	ND	0.5	ug/L	ND				21	
cis-1,2-Dichloroethylene	ND	0.4	ug/L	ND				20	
trans-1,2-Dichloroethylene	ND	1.0	ug/L	ND				25	
1,2-Dichloropropane	ND	0.5	ug/L	ND				25	
cis-1,3-Dichloropropylene	ND	0.4	ug/L	ND				25	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND				25	
Ethylbenzene	ND	0.5	ug/L	ND				35	
Methylene Chloride	ND	4.0	ug/L	ND				25	
Styrene	ND	0.4	ug/L	ND				25	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND				25	
1,1,2,2-Tetrachloroethane	ND	0.6	ug/L	ND				25	
Tetrachloroethylene	ND	0.5	ug/L	ND				31	
Toluene	ND	0.5	ug/L	ND				30	
1,1,1-Trichloroethane	ND	0.4	ug/L	ND				25	
1,1,2-Trichloroethane	ND	0.6	ug/L	ND				25	
Trichloroethylene	ND	0.4	ug/L	ND				30	
Trichlorofluoromethane	ND	1.0	ug/L	ND				25	
1,3,5-Trimethylbenzene	ND	0.5	ug/L	ND				20	
Vinyl chloride	ND	0.4	ug/L	ND				25	
m,p-Xylenes	ND	0.5	ug/L	ND				34	
o-Xylene	ND	0.5	ug/L	ND				32	
Surrogate: 4-Bromofluorobenzene	*79.2*		*ug/L*	*ND*	*99.0*	*83-134*			
Surrogate: Dibromofluoromethane	*84.8*		*ug/L*	*ND*	*106*	*78-124*			
Surrogate: Toluene-d8	*88.0*		*ug/L*	*ND*	*110*	*76-118*			

PARACEL LABORATORIES LTD.

Order #: 0910147

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO:
Project Description: OTEN00019406P

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	2010	200	ug/L	ND	101	68-117			
F2 PHCs (C10-C16)	1290	100	ug/L	ND	80.5	61-129			
F3 PHCs (C16-C34)	3720	100	ug/L	ND	93.0	61-129			
F4 PHCs (C34-C50)	2480	100	ug/L	ND	103	61-129			
Volatiles									
Benzene	35.2	0.5	ug/L	ND	87.9	55-141			
Bromodichloromethane	34.7	0.4	ug/L	ND	86.6	52-139			
Bromoform	45.6	0.5	ug/L	ND	114	52-170			
Bromomethane	20.7	0.7	ug/L	ND	51.8	32-138			
Carbon Tetrachloride	34.2	0.5	ug/L	ND	85.6	49-149			
Chlorobenzene	40.4	0.4	ug/L	ND	101	64-137			
Chloroethane	22.4	1.0	ug/L	ND	56.0	39-152			
Chloroform	35.7	0.5	ug/L	ND	89.2	58-138			
Chloromethane	21.7	3.0	ug/L	ND	54.3	24-163			
Dibromochloromethane	42.7	0.5	ug/L	ND	107	61-153			
1,2-Dibromoethane	38.5	1.0	ug/L	ND	96.4	61-145			
1,2-Dichlorobenzene	35.0	0.4	ug/L	ND	87.6	60-150			
1,3-Dichlorobenzene	34.2	0.4	ug/L	ND	85.6	62-149			
1,4-Dichlorobenzene	35.9	0.4	ug/L	ND	89.8	63-132			
1,1-Dichloroethane	33.3	0.5	ug/L	ND	83.2	51-156			
1,2-Dichloroethane	37.1	0.5	ug/L	ND	92.7	50-140			
1,1-Dichloroethylene	30.5	0.5	ug/L	ND	76.2	43-153			
cis-1,2-Dichloroethylene	33.5	0.4	ug/L	ND	83.8	58-145			
trans-1,2-Dichloroethylene	34.1	1.0	ug/L	ND	85.4	51-145			
1,2-Dichloropropane	35.5	0.5	ug/L	ND	88.7	56-136			
cis-1,3-Dichloropropylene	36.9	0.4	ug/L	ND	92.2	54-141			
trans-1,3-Dichloropropylene	44.0	0.5	ug/L	ND	110	61-140			
Ethylbenzene	38.8	0.5	ug/L	ND	97.1	61-139			
Methylene Chloride	31.3	4.0	ug/L	ND	78.2	58-149			
Styrene	41.4	0.4	ug/L	ND	104	63-143			
1,1,1,2-Tetrachloroethane	41.8	0.5	ug/L	ND	105	61-148			
1,1,2,2-Tetrachloroethane	48.4	0.6	ug/L	ND	121	50-157			
Tetrachloroethylene	37.2	0.5	ug/L	ND	93.1	51-145			
Toluene	40.7	0.5	ug/L	ND	102	54-136			
1,1,1-Trichloroethane	34.9	0.4	ug/L	ND	87.2	55-140			
1,1,2-Trichloroethane	34.4	0.6	ug/L	ND	85.9	63-144			
Trichloroethylene	32.1	0.4	ug/L	ND	80.2	52-135			
Trichlorofluoromethane	34.0	1.0	ug/L	ND	85.1	37-155			
1,3,5-Trimethylbenzene	34.8	0.5	ug/L	ND	87.0	61-151			
Vinyl chloride	24.9	0.4	ug/L	ND	62.2	31-159			
m,p-Xylenes	79.3	0.5	ug/L	ND	99.1	61-139			
o-Xylene	40.9	0.5	ug/L	ND	102	60-142			
Surrogate: 4-Bromofluorobenzene	*74.7*		*ug/L*		*93.3*	*83-134*			
Surrogate: Dibromofluoromethane	*78.8*		*ug/L*		*98.6*	*78-124*			
Surrogate: Toluene-d8	*81.4*		*ug/L*		*102*	*76-118*			

Certificate of Analysis

Report Date: 12-Mar-2009
Order Date:6-Mar-2009

Client: **Trow Associates Inc. (Ottawa)**
Client PO: Project Description: OTEN00019406P

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

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Chain of Custody Record
№ 56696
Pg. ___ of ___

Company Name: Tron
Contact Name: Mark McCadla
Address:
Tel: Cell:
Email:

Project Ref: OTEN0001940 6P
PO#
Quote # ☐Not Quoted
Preservative to be added by Paracel? ☐Yes ☐No

Date Required:
Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular
Regulatory/Guideline Requirements: Table 1

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

Paracel Order # 0910147	Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	PHC (F1 to F4)	BTEX	VOC											Hazardous? (Y/N)
1	MW09-18	GW		3	Mar 6/09	X	X	X											
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Comments:

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
Date: Mar 6/09 Time: 3:38	Date: Time:	Date: Mar 6/09 Time: 3:39	Date: Mar 6/09 Time: 4:18

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy