

FINAL REPORT

NATIONAL CAPITAL COMMISSION

**NCC PROPERTY ASSET NO. 97390, LEITRIM
ROAD, OTTAWA, ONTARIO**

**SUPPLEMENTAL GROUNDWATER
DELINEATION ACTIVITIES**

REF.: 10-730



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**SNC•LAVALIN
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EXECUTIVE SUMMARY

SNC-Lavalin Environment, Division of SNC-Lavalin Inc. (SLE), (formerly known as Aqua Terre), was retained by the National Capital Commission (NCC) to conduct groundwater trichloroethylene (TCE) delineation activities at NCC Property Asset No. 97390 in Ottawa, Ontario. The site consists of a vacant parcel of land owned by the NCC located along the north side of Leitrim Road between Hawthorne Road and Ramsayville Road, formerly leased by the Ontario Ministry of Natural Resources (MNR).

Field activities for this project were completed in two (2) phases. The initial fieldwork program was completed in August 2010 and consisted of borehole drilling, soil sampling and monitoring well installations at six (6) locations, drivepoint groundwater sampling at twelve (12) locations, groundwater monitoring and groundwater sampling at eight (8) new and existing monitoring well locations. The supplemental fieldwork program was completed in September and October 2010 and consisted of borehole drilling, soil sampling and monitoring well installations at ten (10) locations, groundwater monitoring and groundwater sampling at fourteen (14) new and existing monitoring wells. Soil and groundwater samples selected for laboratory analysis were submitted for VOC analyses.

Based on groundwater analytical results in 2010, the extent of TCE contaminated groundwater has been delineated on site. Analysed groundwater samples were reported with TCE concentrations exceeding FIGQG Table 2, Tier 1 and CCME community water supply guidelines in the eastern portion of the site. All analysed groundwater samples in perimeter monitoring wells MW-10-21 to MW-10-25, located along the southeast property boundary, downgradient of TCE contaminated groundwater, satisfied the selected federal guidelines and provincial standards. There is no evidence to suggest the presence of dense non-aqueous phase liquids (DNAPL) beneath the site.

The results of the investigation in 2010 suggest that the TCE contaminated groundwater has not extended off site and off-site receptors are unlikely to experience adverse environmental effects. Given that TCE contamination is present in groundwater, and some residences in the area may still be using groundwater as a drinking water source downgradient of the delineated TCE contamination, continued monitoring is recommended due to the potential for off-site migration.

A groundwater monitoring and sampling program should continue initially on a semi-annual basis for a period of two (2) years to monitor groundwater quality at the site. Semi-annual groundwater monitoring and sampling events should be completed in both the spring (May-June) and fall (September-November). All monitoring wells should be monitored for headspace organic vapour readings and water level depth and sampled for VOCs. The sampling frequency after two years, pending favourable results (i.e. consistent without groundwater quality near the downgradient property boundary with exceedances), should then be reduced to annually for the next two (2) years (Spring or Fall) and once every five (5) years thereafter.

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1. INTRODUCTION

SNC-Lavalin Environment, Division of SNC-Lavalin Inc. (SLE), formerly known as Aqua Terre Solutions Inc. (Aqua Terre), was retained by the National Capital Commission (NCC) to conduct groundwater trichloroethylene (TCE) delineation activities at NCC Property Asset No. 97390 in Ottawa, Ontario (the “site”). The site location is shown in Figure 1. The work was completed in accordance with the SLE proposal dated June 30, 2010 and email dated September 10, 2010. This report documents the methodology and results of the groundwater delineation activities.

1.1 Background

The site consists of a vacant parcel of land owned by the NCC located along the north side of Leitrim Road between Hawthorne Road and Ramsayville Road, formerly leased by the Ontario Ministry of Natural Resources (MNR). The site was leased from the NCC by the MNR circa 1961 and was used as a maintenance and storage depot, which included three buildings, a carpenter shop, and a number of on-site sheds/huts, until the early 1980s at which time it was vacated. The buildings on site have since been demolished and the site is currently comprised of an NCC National Capital Greenbelt trail head and parking lot (Lot P19). The site layout is illustrated on Figure 2. The site currently consists of undeveloped green space on the east portion and forest covered land on the west portion. Leitrim Road is adjacent to the south of the site, further south of Leitrim Road are residential and agricultural properties. Adjacent to the north, east and west of the site is undeveloped, forest covered land.

In 1992, ADAMAS Engineering Ltd. (ADAMAS) conducted a “Soil Characterization Study” following the excavation and removal of a former underground storage tank (UST) located northeast of a former carpenter shop. The UST reportedly contained petroleum products. One of the groundwater samples collected from the excavation and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), was also reported with a trichloroethylene (TCE) concentration of 74.4 micrograms per Litre (µg/L). In 1992, the provincial criterion for TCE in groundwater in a potable groundwater situation was reportedly 50 µg/L.

In 2000, Aqua Terre was retained by the Ontario Realty Corporation (ORC) to assess potential land impacts from the MNR’s tenancy at the maintenance facility. This initial environmental site assessment comprised of a historical review and a site investigation program including a geophysical survey, test pit excavation, borehole drilling, soil sampling, monitoring well installation, monitoring well groundwater sampling and drivepoint groundwater sampling. Soil and groundwater samples were submitted for analysis for a list of contaminants of concern which was based on the existing knowledge of the site history and was comprised of petroleum

hydrocarbons, BTEX and pesticides. The assessment identified an area of organochlorine pesticide impacted soil and groundwater in the vicinity of a former pesticide storage hut.

A supplemental site assessment was also completed by Aqua Terre in 2000, which comprised of test pit excavations and installation and sampling of monitoring wells. Soil and groundwater samples were submitted for analyses of organochlorine pesticides. The supplemental assessment delineated the extent of soils contaminated with organochlorine pesticides and classified the soil as solid, non-hazardous waste suitable for disposal at a licensed municipal landfill (Aqua Terre, 2000). Approximately 900 tonnes of potentially impacted soils were excavated and disposed off site in December 2000 (Aqua Terre, 2001).

The 1992 Adamas report which first identified the potential for TCE contamination in groundwater was not known to Aqua Terre prior to 2008 as it was not referenced in any of Aqua Terre's previous reports for the subject property. This may be a result of the Adamas report being commissioned by the NCC, whereas Aqua Terre's work was originally commissioned by the ORC.

A Limited Phase II Environmental Site Assessment (ESA) was completed by Aqua Terre in 2008. The objectives of the limited Phase II ESA were to firstly determine the presence or absence of trichloroethylene (TCE) historically detected in groundwater in the vicinity of the former carpenter shop and secondly to identify the source area of TCE in groundwater. The 2008 limited Phase II ESA consisted of two phases of borehole drilling, soil sampling, monitoring well installation and drivepoint and groundwater sampling. TCE contamination was confirmed in groundwater in the area just northeast of the former carpenter shop. The groundwater at monitoring well MW08-1 was reported with a concentration of approximately double the federal CCME water quality guideline (CCME, 1999 as updated), but satisfied the current provincial water quality standard for TCE (MOE, 2004). The full extent of groundwater contamination was not delineated, however based on the measured groundwater flow gradient and estimated hydrogeological parameters for soils at the site, SLE had estimated that the maximum extent of contaminant migration, over a 50-year period from when the MNR first occupied the site, would have been in the order of 200 m; given the source location relative to existing development and the interpreted groundwater flow direction at that time, it was determined that any off-site receptors were unlikely to be adversely affected.

In 2009, Aqua Terre was retained by the NCC to conduct groundwater delineation activities to delineate the extent of TCE contamination in groundwater in the vicinity of the former carpenter shop and verify that there was limited potential of adverse affects to off-site receptors. The delineation activities consisted of borehole drilling and monitoring well installation, soil and groundwater sampling and the advancement of drivepoints for groundwater sampling.

Concentrations of TCE in groundwater samples collected from two (2) monitoring wells and eight (8) drivepoints exceeded the federal CCME water quality guideline (CCME, 1999 as updated), but satisfied the provincial water quality standard (MOE, 2004). The extent of groundwater contaminated with TCE was not delineated to the east. Supplemental groundwater delineation was recommended to identify the source and extent of TCE contamination and any potential for adverse effects to off-site receptors.

1.2 Scope of Work

The objective of the groundwater delineation activities was to determine the source and extent of TCE contamination in groundwater and assess the potential for adverse effects to off-site receptors.

Following completion of the initial field activities, which succeeded in delineating the extent of TCE contamination in groundwater to the northeast, further delineation activities were conducted to delineate the extent of TCE contamination to the southeast and along the southeast property line.

In order to achieve the above objective, SLE completed the following scope of work:

- Project Start-up – start-up activities included reviewing historical information, obtaining access to the site, coordinating the identification of any buried utilities, updating health and safety documents for the project and selecting investigation locations;
- Initial Field Work Program – the initial field work program consisted of borehole drilling, soil sampling and monitoring well installation at six (6) locations, groundwater sampling of eight (8) monitoring wells and the advancement of drivepoints for groundwater sampling at twelve (12) locations; and,
- Supplemental Field Work Program – the supplemental field work program was implemented following confirmation that additional delineation was required in the southeast portion of the site. The supplemental field work program consisted of borehole drilling, soil sampling and monitoring well installation at ten (10) locations and groundwater sampling of fourteen (14) monitoring wells.

1.3 Report Structure

Section 2 of this report documents the investigation methodology of the initial and supplemental groundwater delineation activities. Regulatory criteria selection is discussed in Section 3. Section 4 presents the results of the field work activities and Section 5 discusses the

significance of the results to the objectives of the delineation activities. Conclusions and recommendations are provided in Section 6. Limitations of the investigation and references cited are presented in Section 7 and Section 8, respectively.

2. METHODOLOGY

The field work program for the groundwater delineation activities was completed from August to October 2010.

The field work was conducted in accordance with established protocols including the Ontario Ministry of Environment and Energy (MOEE) *"Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario"* (MOEE, 1996), Canadian Council of Ministers of the Environment (CCME) *"Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites"* (CCME, 1993) and generally accepted industry practices. Each of the field program elements are described in detail in the following sections.

2.1 Project Start-up

Prior to the start of the field program, a land access permit (No. 11618) was issued by NCC on July 23, 2010. Prior to conducting intrusive investigation activities in August and September 2010, all public underground utilities (e.g. water, gas, hydro, sewer, telephone, etc.) in the study area were located by USL-1 Underground Service Locators Inc. (USL-1) of Ottawa, Ontario. USL-1 confirmed that the proposed investigation area in the vicinity of NCC Parking Lot P19 was free of public utility services prior to any ground disturbance. As the subject site is vacant, undeveloped land, with no easements in the vicinity of the study area, no private services connections were identified.

All tasks completed as part of the field programs were subject to a health and safety plan and specific site investigation protocols. Procedures outlined in Aqua Terre's Health and Safety Manual (Version 2.1, Aqua Terre 2006) which has been adapted by SLE were followed as part of the investigation. On-site health and safety procedures included a kick-off meeting and daily tailgate health and safety meetings with all field personnel.

2.2 Initial Field Work Program

2.2.1 Borehole Drilling and Soil Sampling

On August 25 and 26, 2010, six (6) boreholes (BH-10-10 to BH-10-15) were advanced on the site by Strata Soil Sampling Inc. (Strata) of Richmond Hill, Ontario, under the supervision of SLE personnel. Boreholes were advanced using a Geoprobe® Model 420M direct-push drilling unit, equipped with direct-push soil probe rods, to depths ranging from 4.3 to 6.7 metres below ground surface (m bgs). The maximum depth of boreholes/monitoring wells was targeted near the interface between the silty sand layer and the underlying low hydraulic conductivity soils;

since TCE is a dense non-aqueous phase liquid (DNAPL), maximum concentrations of TCE would be anticipated near the sand/clay interface if DNAPL was present. Borehole locations are shown in Figure 2. Borehole drilling and soil sample information are presented in borehole stratigraphic logs in Appendix A.

Soil samples were collected from each borehole using 1.2 m long soil probe rods lined with expendable PVC sample liners; two discrete soil samples were collected from each 1.2 m long sample liner. Each soil sample was split for field screening and possible laboratory analysis. The portion of each sample retained for field screening was placed in a re-sealable plastic bag, logged for stratigraphy and inspected for visual evidence of impact. Headspace vapour readings in the sample bags were measured in the field using a pre-calibrated RAE Systems miniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp. The portion of each sample collected for possible laboratory analysis was placed in laboratory-supplied glass sample jars.

SLE proposed to place all soil samples on hold pending the groundwater analytical results from Maxxam Analytics Ltd. (Maxxam) for laboratory analysis for volatile organic compounds. Based on the groundwater analytical and soil field screening results, SLE recommended to NCC that, one (1) soil sample (BH10-15-5) be submitted to Maxxam Analytics (Maxxam) of Ottawa, Ontario for laboratory analyses for VOCs. The soil sample selected for laboratory analysis from borehole BH-10-15 was the sample collected from the silty sand layer located immediately above low hydraulic conductivity silty clays, and was selected based on its elevated PID reading in combination with the same rationale as the targeting well depths to the horizon where one would expect to find DNAPL, if present (i.e. pooled immediately above the low hydraulic conductivity soils).

2.2.2 Monitoring Well Installation

All six (6) boreholes (BH-10-10 to BH-10-15) were instrumented as monitoring wells and designated as MW-10-10 to MW-10-15. Monitoring wells were constructed using 1.5 m long, 50 mm inner diameter, flush-threaded PVC well screens. A clean silica sand pack was placed in the annulus around the well screens to approximately 0.3 m above the top of screens. Solid risers were installed above the screens to above ground surface. The annulus above the sand pack was backfilled with a bentonite seal to ground surface. Each monitoring well was finished with stick-up protective steel casings and instrumented with dedicated purging equipment, including an inertial foot valve and low density polyethylene tubing. Completion details for the monitoring wells are included in the borehole logs in Appendix A.

The monitoring wells were developed on August 27, 2010 by removal of three well volumes of groundwater or until purged dry three (3) times. Top of pipe and ground surface elevations at

each new monitoring well were surveyed on August 27, 2010. Elevations were surveyed relative to a site benchmark (southwest corner of a concrete slab located on the east side of the site gate located at the northwest corner of the parking lot) that was assigned an elevation of 100.000 m. Surveyed elevations are presented in Table 1 and on the borehole logs in Appendix A.

The six (6) monitoring wells were registered with the MOE in accordance with Ontario Regulation 903. A copy of the well record is reproduced in Appendix B.

2.2.3 Groundwater Sampling - Drivepoints

Drivepoint groundwater sample collection was completed by Strata, under the supervision of SLE personnel, on August 26, 2010. Drivepoints were advanced using a Geoprobe® Model 420M direct-push drilling unit equipped with a SP16 screened stainless steel drivepoint sample collection system. The screened sampler was driven to the desired sampling depth corresponding to the appropriate depth of the bottom of the sand layer above the low hydraulic conductivity clay layer, using direct-push soil probe rods and an expendable steel drivepoint. Similar to the targeted well depths, the maximum depth of drivepoints was selected to near the interface between the silty sand layer and the underlying low hydraulic conductivity soils at the depth that maximum TCE concentrations would be encountered if DNAPL was present.

Upon reaching the specified depth, the outer sheath of the sample tool was retracted to expose the full one (1) m length of 16 millimetre (mm) diameter stainless steel 0.004 slot screen. Groundwater samples were purged and collected directly into laboratory-prepared sample containers using a 9.5 mm diameter stainless steel inertial foot valve and high density polyethylene tubing. Following sample collection, the expendable drivepoint was detached and the hole was backfilled with granular bentonite to ground surface. A strong magnet, sheathed in a bright orange plastic shell was embedded approximately 50 mm bgs at each drivepoint location so that the locations could be readily found and re-established using a metal detector, if required. All re-useable sampling equipment was decontaminated using a Liquinox®/water wash and de-ionized water rinses between sample locations to prevent cross-contamination.

Drivepoint groundwater sampling locations consisted of three down gradient rows approximately perpendicular to the direction of groundwater flow and aligned 20, 40 and 60 m down gradient of the row of drivepoints numbered DP09-17 to DP09-22. Thirteen (13) drivepoints (DP-10-23 to DP-10-35) were advanced at twelve (12) sample locations, numbered sequentially in the order that they were advanced. Drivepoint DP-10-32 was advanced however no groundwater sample could be collected due to poor groundwater recharge. Drivepoint DP-10-33 was advanced immediately adjacent to drivepoint DP-10-32. Drivepoints DP-10-23 to DP-10-31 and DP-10-33 to DP-10-35, where groundwater samples were successfully collected, are shown in Figure 2.

All groundwater samples were collected in laboratory-prepared sample containers, stored in a cooler with ice and delivered to Maxxam for analysis for VOCs.

2.2.4 Groundwater Monitoring and Sampling – Monitoring Wells

Groundwater monitoring was conducted on August 26 and 27, 2010 as summarized in Table 1. Headspace organic vapour concentrations, water levels, and product thickness (if present) were measured at all thirteen (13) monitoring wells, including the seven (7) existing monitoring wells (MW08-1 to MW08-5, MW09-8 and MW09-9) and the six (6) newly installed monitoring wells (MW-10-10 to MW-10-15). Headspace organic vapour concentrations were measured using a pre-calibrated RAE Systems MiniRAE 2000 photoionization detector. Water levels were measured from the top of the PVC riser using an electronic water level meter. A clear bailer was used to assess the potential presence of free product in each monitoring well.

Groundwater samples were collected from eight (8) monitoring wells (MW09-8, MW09-9, and MW-10-10 to MW-10-15) on August 27, 2010. Prior to sampling, all wells were purged of three (3) well volumes of groundwater or were purged dry three (3) times. Following purging, samples were collected using dedicated polyethylene tubing and inertia foot valves at each well. The foot valve was positioned approximately 0.3 m from the bottom of each well during sample collection. Groundwater samples were collected in laboratory prepared containers, stored in a cooler with ice and delivered to Maxxam Analytics of Ottawa, Ontario for laboratory analysis.

2.3 Supplemental Field Work Program

2.3.1 Borehole Drilling and Soil Sampling

On September 28 and 29, 2010, ten (10) boreholes (BH-10-16 to BH-10-25) were advanced on the site under the supervision of SLE personnel. Boreholes were advanced using a Geoprobe® Model 540M direct-push drilling unit equipped with direct-push soil probe to depths ranging from 3.1 to 4.3 m bgs. Borehole locations are shown in Figure 2. Borehole drilling and soil sample information are presented in borehole stratigraphic logs in Appendix A.

Soil samples were collected from each borehole using 1.2 m long soil probe rods lined with disposable PVC sample liners; two discrete soil samples were collected from each 1.2 m long sample liner for field screening. Each soil sample was logged for stratigraphy and inspected for visual evidence of impact.

2.3.2 Monitoring Well Installation

All ten (10) boreholes were instrumented as monitoring wells and designated as MW-10-16 to MW-10-25. Monitoring wells were constructed using 1.5 m long, 50 mm inner diameter, flush threaded PVC well screens. A clean silica sand pack was placed in the annulus around the well screens to approximately 0.3 m above the top of the screens. The annulus above the sand pack was backfilled with a bentonite seal to ground surface. Each monitoring well was finished with stick-up protective steel casings and instrumented with dedicated purging equipment, including an inertial foot valve and low density polyethylene tubing. Completion details for the monitoring wells are included in the borehole logs in Appendix A.

The monitoring wells were developed on October 1, 2010 by removal of three well volumes of groundwater from each well or until purged dry three (3) times. Top of pipe and ground surface elevations at each new monitoring well were surveyed on October 1, 2010. Elevations were surveyed relative to a site benchmark (southwest corner of a concrete slab located on the east side of the site gate located at the northwest corner of the parking lot) that was assigned an elevation of 100.000 m. Surveyed elevations are presented in Table 1 and on the borehole logs in Appendix A.

The ten (10) monitoring wells were registered with the MOE in accordance with Ontario Regulation 903. A copy of the well record is reproduced in Appendix B.

2.3.3 Groundwater Monitoring and Sampling

Groundwater level monitoring was conducted on October 1, 2010 as summarized in Table 1. Headspace organic vapour concentrations, water levels, and product thickness (if present) were measured at 23 monitoring wells, including the thirteen (13) existing monitoring wells (MW-08-1 to MW-08-05, MW09-8, MW09-9 and MW-10-10 to MW-10-15) and the ten (10) newly installed monitoring wells (MW-10-16 to MW-10-25). Headspace organic vapour concentrations were measured using a GasTech Model 1238 ME organic vapour meter (OVM). Water levels were measured from the top of the PVC well casings using an electronic water level meter. A clear bailer was used to assess the potential presence of free product in each monitoring well.

Groundwater samples were collected from 14 monitoring wells (MW-10-10, MW-10-11, MW-10-13 and MW-10-15 to MW-10-25) on October 1, 2010 using inertial hand pumps constructed of plastic foot valves and low density polyethylene tubing. Prior to sampling, all wells were purged of three (3) well volumes of groundwater or were purged dry three (3) times. Following purging, samples were collected using dedicated polyethylene tubing and inertial foot valves at each well. The foot valve was positioned approximately 0.3 m from the bottom of each well during sample collection. Groundwater samples were collected in laboratory prepared containers,

stored in a cooler with ice and delivered to Maxxam Analytics of Ottawa, Ontario for laboratory analysis.

2.4 Quality Assurance/Quality Control (QA/QC)

The general philosophy of the Quality Assurance and Quality Control (QA/QC) program is to verify that analytical data is reliable and representative of site conditions. To this end, SLE has established its own QA/QC program based on Canadian Council of Ministers of the Environment (CCME, 1994) and MOE (MOEE, 1996) protocols. The QA/QC program included the use of a field rinse blank and laboratory control samples as quality control samples.

As part of the QA/QC program, sampling protocols included minimizing sample handling, using dedicated non-contaminating sampling equipment to the greatest extent practicable, using sample specific identification and labelling procedures and using chain of custody records.

Field QA/QC samples for the groundwater sampling program included:

- Rinse Blank – Rinse Blank sample collected after decontamination procedures were completed at DP-10-28; and
- MW-10-99 – Duplicate sample collected from MW-10-15 on August 27, 2010; and
- MW-10-98 – Duplicate sample collected from MW-10-18 on October 1, 2010; and
- DP-10-99 – Duplicate sample collected from DP-10-34 on August 26, 2010.

Reported laboratory QA/QC measures included the use and analysis of chemical surrogates and comparison to surrogate recovery standards and preparation and analysis of laboratory blank, duplicate and matrix spike samples.

3. REGULATORY CRITERIA

Regulatory criteria applicable to the site have been previously established as part of past intrusive investigations completed at the site (Aqua Terre, 2008 and 2009). The rationale used to select federal and provincial regulatory criteria is discussed in detail in Appendix C.

Historically, soil and groundwater analytical results have been compared to federal guidelines using Canadian Council of Ministers of the Environment (CCME) *Canadian Environmental Quality Guidelines*, Chapter 2 - Community Water Supplies, (CCME, 1998, as updated) and CCME *Canadian Environmental Quality Guidelines*, Chapter 7 - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, Residential/Parkland land use, coarse textured soils (CCME, 1999, as updated). In addition, groundwater analytical results have been compared to the recently released Federal Interim Groundwater Quality Guidelines (FIGQGs) Table 2, Tier 1: Generic Guidelines for residential/parkland land use and coarse textured soils (FIGQGs, 2010).

Soil and groundwater analytical results have been compared to provincial standards using the Ontario Ministry of the Environment (MOE) *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (O. Reg. 153/04)* Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for all residential/parkland/institutional property use and coarse textured soils (MOE, 2004).

4. RESULTS

4.1 Soil Stratigraphy

Soil stratigraphy at the site was interpreted from the stratigraphic information obtained from soil sampling conducted during this and previous investigations. Borehole stratigraphic logs for the current investigation are presented in Appendix A.

Overburden at the site consists of brown to grey, medium-grained sand over grey, silty clay. The thickness of the sand is in the range of 1.1 to 4.3 m thick. The silty clay layer extends to a depth of at least 6.7 m bgs, the maximum depth of drilling completed at the site to date. Based on a comparison to borehole logs of the previous phases of drilling, it appears that the interface between the silty sand and silty clay layer is deepest and at the lowest elevation, in the forest covered portion of the site, east of the parking area. The interface appears to be shallow and at a higher elevation in the borehole line (BH-10-21 to BH-10-25) along Leitrim Road.

Based on historical reports written for the site, the bedrock beneath the site is reported as interbedded shale of the Carlsbad Formation. An on-line source at a Geologic Survey of Canada website indicates bedrock depth at approximately 25 to 50 m bgs.

4.2 Groundwater Monitoring Results

Groundwater monitoring data recorded in August and October 2010 are summarized in Table 1. The headspace organic vapour concentrations measured in August and October 2010 ranged from <25 parts per million by volume (ppmv) to 290 ppmv at MW-10-18 and MW-10-22, as summarized in Table 1. Water levels ranged from approximately 0.20 to 1.91 m bgs during the August and October monitoring events. Based on the full round of water levels measured on October 1, 2010, relative groundwater elevations in the monitoring wells ranged from 97.81 m above local datum (ald) (MW-10-22) to 98.79 m ald (MW08-5). The interpreted horizontal groundwater direction flow in overburden is to the east/southeast, with a hydraulic gradient of approximately 0.006, as shown in Figure 3.

Sheen or odours were not noted in any of the monitoring wells. Dense non-aqueous phase liquid (DNAPL) was not observed to have settled out at the bottom of any of the collected groundwater sample containers.

4.3 Soil Analytical Results

Analytical results for the soil sample submitted for laboratory analyses for VOCs are summarized in Table 2. Federal guidelines and provincial standards are also summarized for

comparison. VOCs were not detected in the soil sample collected from borehole BH-10-15 and submitted for analysis. Copies of laboratory certificates of analyses are provided in Appendix D.

Soil sample BH-10-15-5 was inadvertently shipped to Maxxam's laboratory in Quebec. Analysis in Quebec resulted in laboratory reportable detection limits (RDLs) at levels above either, but not both, of the selected federal guidelines or provincial standards for benzene, chloroform, 1,2-dichloroethane, 1,1-dichloroethylene, 1,2-dichloropropane, 1,3-dichloropropene, ethylbenzene, 1,1,2,2-tetrachloroethane, TCE and vinyl chloride. The primary intent of analysing the soil sample was to verify that gross soil contamination was not present. Given that the sample results were reported as "not detected" above the reported RDL and that the results also satisfied at least one of the selected federal guideline or provincial standard, even with elevated RDLs, further review of potential soil contamination was not warranted within the limits of the contaminated groundwater plume.

4.4 Groundwater Analytical Results

Groundwater analytical results for drivepoint and monitoring well samples collected and submitted for VOC analyses in August and October 2010 are summarized in Table 3 and 4, respectively. Analytical results for the blind field duplicate samples and QA/QC rinse sample are also summarized in Tables 3 and 4. Federal guidelines and provincial standards are also summarized in Tables 3 and 4 for comparison. Copies of laboratory certificates of analysis from the current investigation are included in Appendix E.

The table below outlines the groundwater samples and parameters that exceeded the selected guidelines and/or standards in August and October 2010:

| Location | Sampling Event | Parameter Exceeds MOE (2004) Table 2 Standard | Parameter Exceeds CCME (1999 as updated) Guidelines | Parameter Exceeds FIGQGs (2010) Table 2, Tier 1 |
|--------------------------------|----------------|---|---|---|
| <i>Drivepoints</i> | | | | |
| DP-10-23 | August | None | Trichloroethylene | None |
| DP-10-29 | August | None | Trichloroethylene | Trichloroethylene |
| DP-10-30 | August | None | Trichloroethylene | Trichloroethylene |
| DP-10-34 | August | None | Trichloroethylene | None |
| <i>Monitoring Wells</i> | | | | |
| MW-09-8 | August | None | Trichloroethylene | None |
| MW-10-11 | October | None | Trichloroethylene | None |
| MW-10-13 | August | None | Trichloroethylene | None |
| | October | None | Trichloroethylene | None |
| MW-10-17 | October | None | Trichloroethylene | None |

Detectable concentrations of TCE were reported in the groundwater samples collected from four (4) drivepoints (DP-10-24, -28, -31 and -33) and five (5) monitoring wells (MW09-9 (August), MW-10-10 (August/October), MW-10-11 (August), MW-10-15 (August and October) and MW-10-20 (October)). However, all detected concentrations at the above-noted locations satisfied the selected site standards and guidelines. Concentrations of TCE in all other monitoring wells were below the laboratory reportable detection limits during both sampling events.

As shown in Tables 3 and 4, cis- and trans-dichloroethylene, principal degradation products of TCE, were detected at six (6) drivepoint locations (DP-10-23, -24, -29, -30, -31 and -34) and nine (9) monitoring wells (MW09-8 (August), MW-10-10, -11, -13, and -15 (August and October), and MW-10-16, -17, -20, and -24 (October)); however, all detected concentrations at these locations satisfied the selected federal guidelines and provincial standards.

4.5 Quality Assurance & Quality Control

As part of the groundwater analytical program conducted in August and October 2010, blind QA/QC field duplicate groundwater samples were collected from MW-10-15 (MW-10-99), DP-10-34 (DP-10-99) and MW-10-18 (MW-10-98) and one (1) rinse blank sample was collected for laboratory analysis of VOCs. The analytical results from the QA/QC samples are summarized in Tables 3 and 4.

Relative percent differences (RPDs) were calculated only where detected concentrations in both samples were greater than five (5) times the laboratory detection limits. Calculated RPD values are provided in Appendix F.

The RPDs calculated for the duplicate groundwater samples collected in August and October 2010 ranged from 0% to 17% for TCE. RPDs for all other parameters analysed were not calculable as the laboratory results were less than five (5) times the laboratory detection limit. The calculated RPDs were less than the RPD alert limit of 30%, which is considered acceptable for aqueous matrices (USEPA, 1996).

All VOCs were reported as not-detected in the rinse blank sample collected, indicating that field decontamination methods were adequate in preventing cross-contamination between drivepoint sample locations.

Results of laboratory QA/QC analyses are included in the laboratory certificates of analysis provided in Appendix E. Analytical results for the laboratory blanks, matrix spikes and duplicates satisfied laboratory acceptance criteria.

Based on the above discussion, the results of QA/QC analyses were of good quality and are acceptable without qualification.

5. DISCUSSION

To aid in the discussion of the distribution of TCE contamination, the reported TCE concentrations from all monitoring well and drivepoint groundwater samples from August and October 2010 are shown on Figure 4, without differentiation of the date of sample collection. Concentrations which exceed the selected federal guidelines and provincial standards are shown in magenta, red, or blue text, whereas concentrations that satisfy all the selected criteria are shown in green text.

Based on a review of the TCE concentration distribution on Figure 4, the following observations are made:

- The highest TCE concentrations in groundwater were reported in analysed groundwater samples for drivepoints DP-10-29 and DP-10-30, exceeding selected federal guidelines but satisfying the selected provincial standards. This suggests the centre of the contamination plume to be near these.
- Additional analysed groundwater samples from six (6) monitoring wells and/or drivepoints exceed the CCME community water supply guideline for TCE while satisfying FIGQGs Table 2, Tier 1 and MOE (2004) Table 2 site condition standards. These groundwater sampling locations extend to the southeast/northwest of the suggested centre of the contamination plume.
- The locations of analysed groundwater water samples with elevated TCE concentrations appear to correlate with the area in which the silty sand and silty clay interface is deepest or at the lowest relative elevation; however the elevated groundwater concentrations at the site are not indicative of DNAPL presence. Since monitoring well and drivepoint depths were targeted in areas where DNAPL would monitoring wells would most likely be found, no there is no evidence of DNAPL beneath the site.
- The centralization of the elevated TCE concentrations between MW09-8 and MW-10-13/DP-10-23 appear to corroborate the interpreted east-northeast or east-southeast direction of shallow groundwater flow in overburden. This may be indicative of fluctuations in shallow groundwater flow direction in overburden, as well as dispersion of TCE as it migrates from the presumed source area.
- All remaining analysed drivepoint and monitoring well groundwater samples are either non-detectable or meet the selected federal guidelines and provincial standards for the analysed VOC parameters.

Overall, the analytical data collected during 2010 groundwater delineation activities, suggest that the TCE contamination plume has been successfully delineated within the property

boundaries in the vicinity of drivepoints DP-10-29 and DP-10-30. The reported concentrations of TCE in soil and groundwater samples were not of a magnitude that would suggest the presence of free phase DNAPL in the sand layer overlying the low hydraulic conductivity clay layer. TCE concentrations were confirmed to satisfy the selected federal guidelines and provincial standards in groundwater samples from the line of monitoring wells MW-10-21 to MW-10-25, along the southeast property boundary, located perpendicular to the direction of groundwater flow. The reported concentrations do not show evidence of free product or a significant quantity of contaminated groundwater.

6. CONCLUSIONS AND RECOMMENDATIONS

SLE was retained by the NCC to conduct supplemental groundwater trichloroethylene (TCE) delineation activities at NCC Property Asset No. 97390 in Ottawa, Ontario. Field activities completed from August to October 2010 included borehole drilling, soil sampling, monitoring well installation, groundwater monitoring and groundwater sample collection from monitoring wells and drivepoints.

6.1 Conclusions

Based on groundwater analytical results in 2010, the extent of TCE contaminated groundwater has been delineated on site. Analysed groundwater samples were reported with TCE concentrations exceeding FIGQG Table 2, Tier 1 and CCME community water supply guidelines in the eastern portion of the site. All analysed groundwater samples in perimeter monitoring wells MW-10-21 to MW-10-25, located along the southeast property boundary, downgradient of TCE contaminated groundwater, satisfied the selected federal guidelines and provincial standards. There is no evidence to suggest the presence of DNAPL beneath the site.

The results of the investigation in 2010 suggest that the TCE contaminated groundwater has not extended off site and off-site receptors are unlikely to experience adverse environmental effects.

6.2 Recommendations

Given that TCE contamination is present in groundwater, and some residences in the area may still be using groundwater as a drinking water source downgradient of the delineated TCE contamination, continued monitoring is recommended due to the potential for off-site migration.

A groundwater monitoring and sampling program should continue initially on a semi-annual basis for a period of two (2) years to monitor groundwater quality at the site. Semi-annual groundwater monitoring and sampling events should be completed in both the spring (May-June) and fall (September-November). All monitoring wells should be monitored for headspace organic vapour readings and water level depth and sampled for VOCs. The sampling frequency after two years, pending favourable results (i.e. consistent without groundwater quality near the downgradient property boundary with exceedances), should then be reduced to annually for the next two (2) years (Spring or Fall) and once every five (5) years thereafter.



7. DISCLAIMER

The statements made in this report are based solely on the information obtained to date as part of the above referenced study. SNC-Lavalin Environment, Division of SNC-Lavalin Inc. (SLE) has used its professional judgement in assessing this information and formulating its opinion and recommendations. New information may result in a change in this opinion. The mandate at SLE is to perform the tasks prescribed by the Client with the due diligence of the profession. No other warranty or representation, expressed or implied, as to the accuracy of the information or recommendations is included or intended in this report. The results of this study should in no way be construed as a warranty that the subject property is free from any and all contamination.

SLE disclaims any liability or responsibility to any person or party, other than the party to whom this report is addressed, for any loss, damage, expense, fine, or penalty which may arise or result from the use of any information or recommendations contained in this report. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the sole responsibility of the third party.

Submitted by:

**SNC-LAVALIN ENVIRONMENT
DIVISION OF SNC-LAVALIN INC.**

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Environmental Specialist

Steve Wegner, P. Eng.
Senior Reviewer

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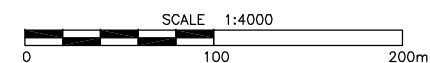
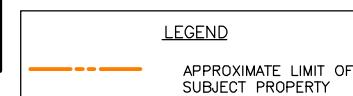
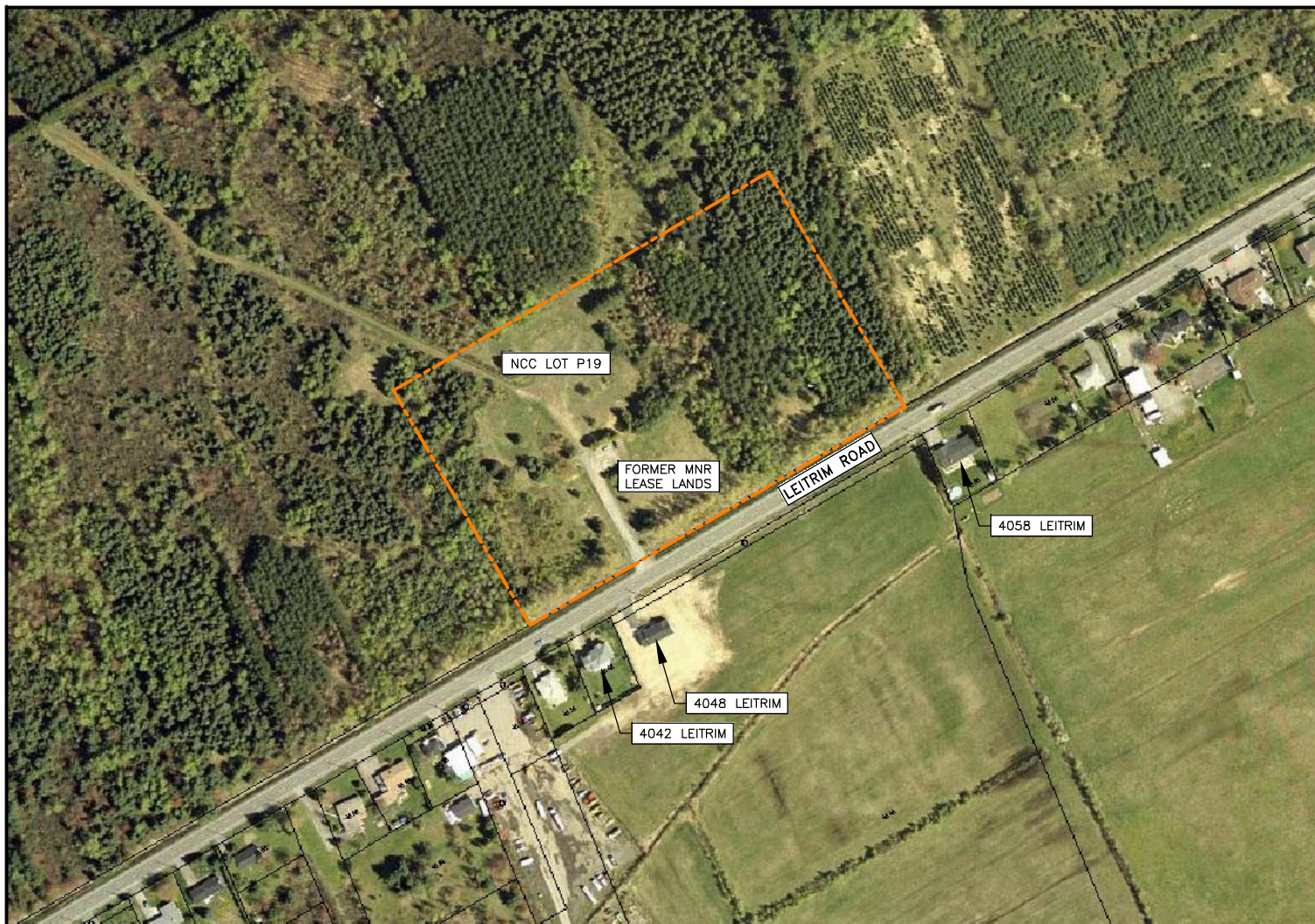
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FIGURES



NOTE(S):
 1. SCALE AND SITE INFRASTRUCTURE LOCATIONS ARE APPROXIMATE
 2. INFORMATION ON THIS FIGURE MAY BE LOST IF IT IS PHOTOCOPIED, FAXED OR PRINTED FROM PDF

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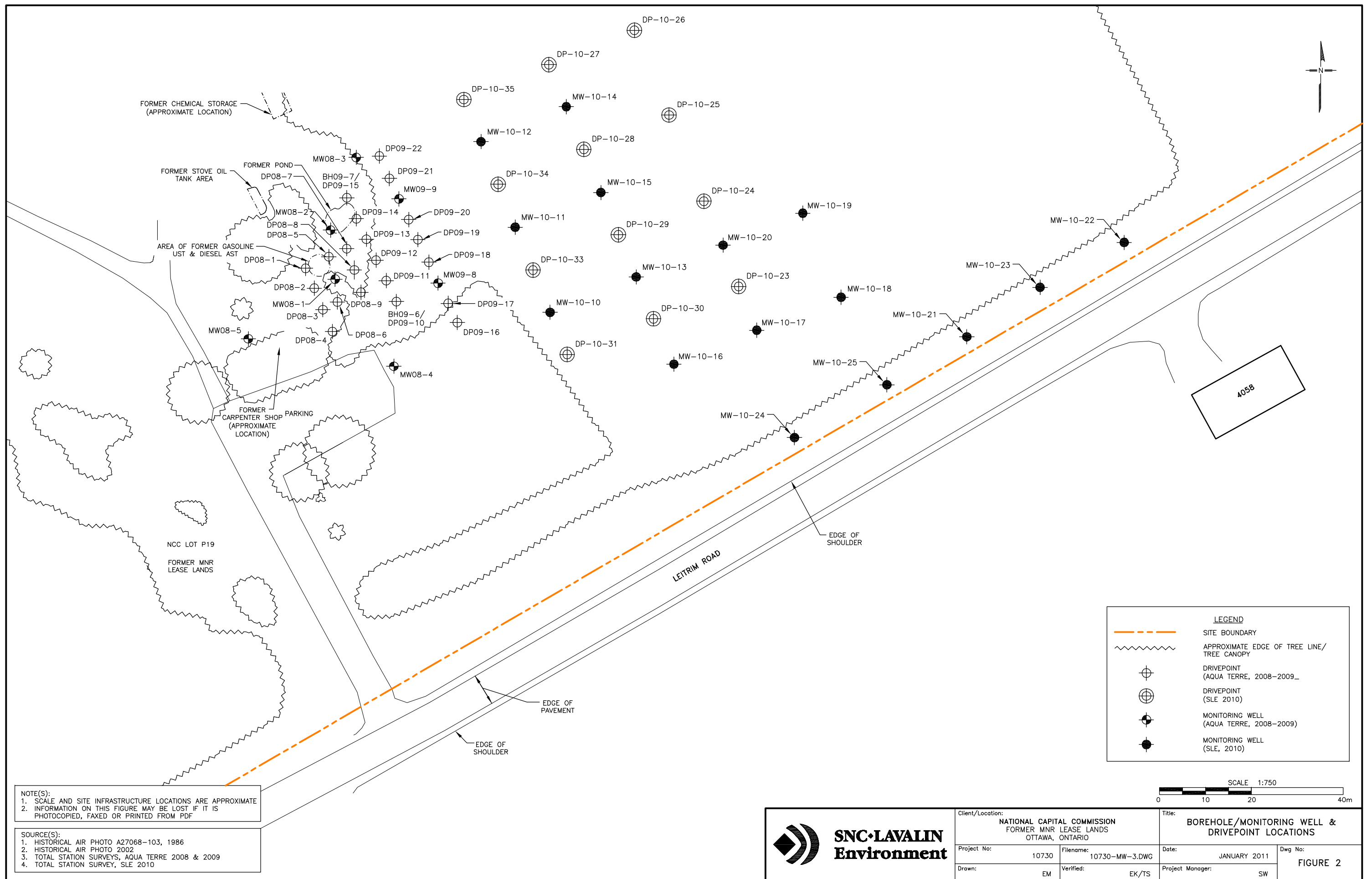
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 FORMER MNR LEASE LANDS
 OTTAWA, ONTARIO

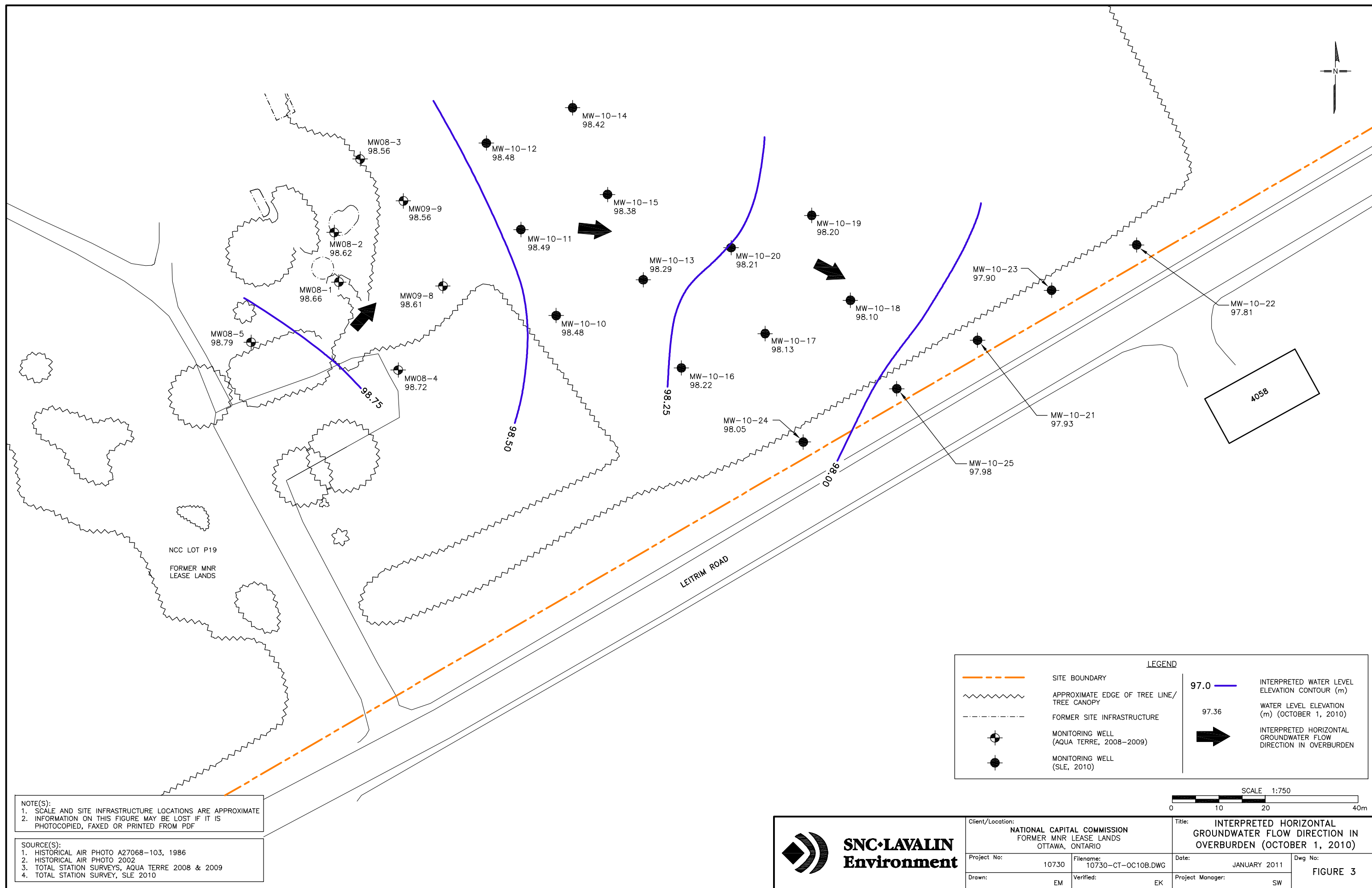
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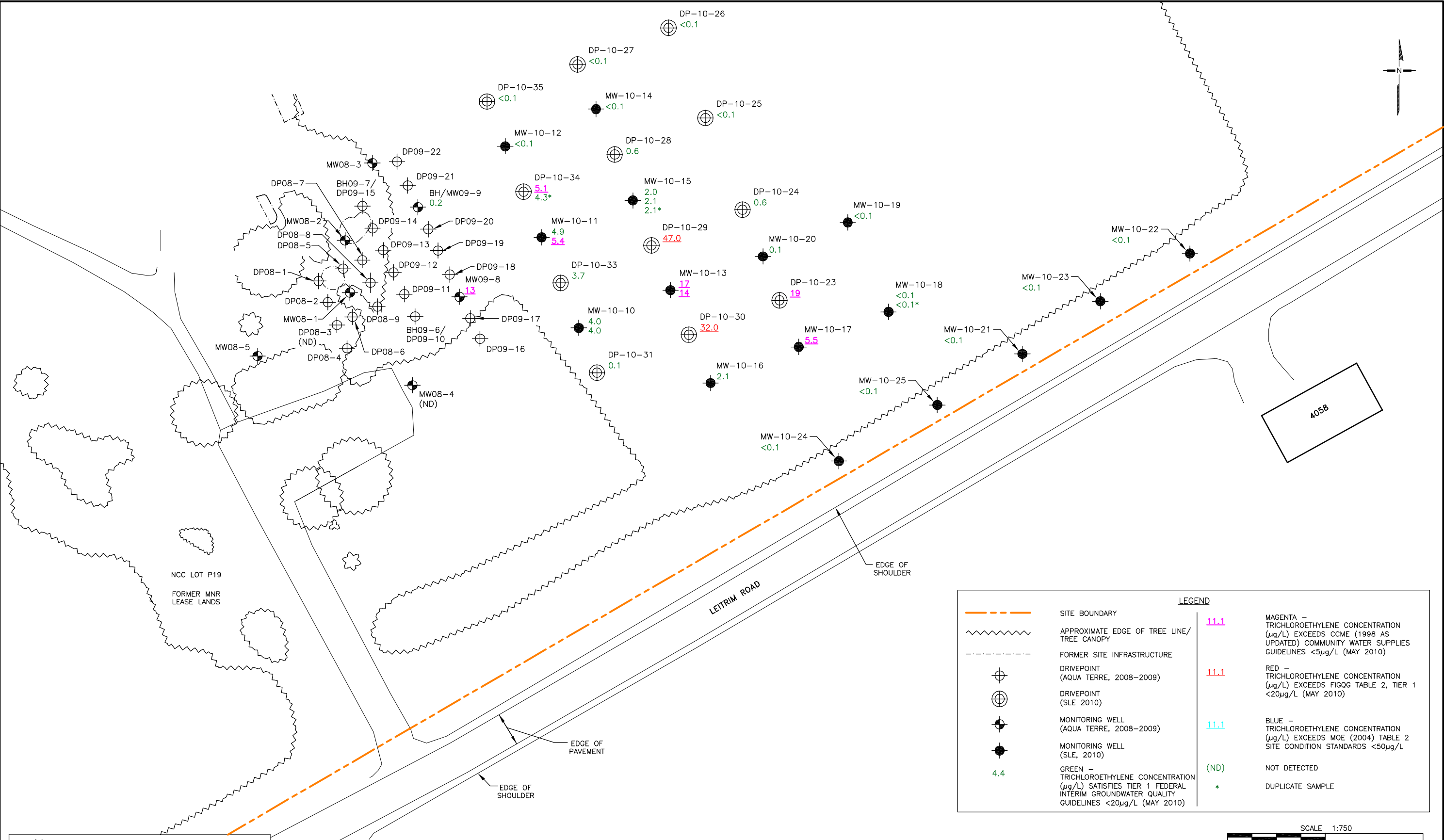
Title:
 SITE LOCATION

| | |
|------------------|--------------|
| Date: | OCTOBER 2010 |
| Project Manager: | SW |

Dwg No:
 FIGURE 1







NOTE(S):
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SOURCE(S):
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2. HISTORICAL AIR PHOTO 2002
3. TOTAL STATION SURVEYS, AQUA TERRE 2008 & 2009
4. TOTAL STATION SURVEY, SLE 2010



| | | | |
|--|-------|---|-------------------|
| Client/Location: NATIONAL CAPITAL COMMISSION FORMER MNR LEASE LANDS OTTAWA, ONTARIO | | Title: MONITORING WELL & DRIVEPOINT TCE CONCENTRATIONS (2010) | |
| Project No: | 10730 | Filename: | 10730-TCE-C-1.DWG |
| Drawn: | EM | Date: | JANUARY 2011 |
| Verified: | EK/TS | Dwg No: | FIGURE 4 |
| | | Project Manager: | SW |

TABLES

TABLE 1 GROUNDWATER LEVEL MONITORING SUMMARY
Former MNR Lease Lands, Leitrim Road, Ottawa, ON
(see end of table for footnotes)

| Monitoring Well | Ground Surface Elevation ¹ (m ald) | Top of PVC Casing Elevation ¹ (m ald) | Date | OMV Reading ² (ppmv) | PID Reading ³ (ppmv) | Water Level Depth (m btc) | Water Level Depth (m bgs) | Water Level Elevation ¹ (m ald) |
|-----------------|--|---|-----------|------------------------------------|------------------------------------|------------------------------|------------------------------|---|
| MW08-1 | 99.78 | 100.64 | 23-Jun-08 | <25 | nm | 1.82 | 0.96 | 98.82 |
| | | | 27-Jun-08 | nm | 1.3 | 1.81 | 0.95 | 98.83 |
| | | | 16-Sep-08 | nm | nm | 2.45 | 1.60 | 98.19 |
| | 99.83 | 100.65 | 5-Aug-09 | nm | nm | 1.90 | 1.04 | 98.74 |
| | | | 14-Aug-09 | <25 | nm | 2.07 | 1.25 | 98.58 |
| | | | 8-Sep-09 | nm | nm | 2.29 | 1.47 | 98.36 |
| | ns | 100.65 | 20-Aug-10 | nm | nm | 2.28 | 1.46 | 98.37 |
| | | | 26-Aug-10 | nm | 0.2 | 2.22 | 1.40 | 98.43 |
| | | | 31-Aug-10 | nm | nm | 2.26 | 1.44 | 98.39 |
| | | | 1-Oct-10 | <25 | nm | 1.99 | 1.17 | 98.66 |
| MW08-2 | 99.66 | 100.70 | 23-Jun-08 | <25 | nm | 1.89 | 0.85 | 98.81 |
| | | | 27-Jun-08 | nm | 2.0 | 1.90 | 0.85 | 98.81 |
| | | | 16-Sep-08 | nm | nm | 2.54 | 1.50 | 98.16 |
| | | | 5-Aug-09 | nm | nm | 1.99 | 0.94 | 98.72 |
| | 99.74 | 100.71 | 14-Aug-09 | <25 | nm | 2.16 | 1.19 | 98.55 |
| | | | 8-Sep-09 | nm | nm | 2.37 | 1.40 | 98.34 |
| | | | 20-Aug-10 | nm | nm | 2.37 | 1.40 | 98.34 |
| | ns | 100.71 | 26-Aug-10 | nm | 2.1 | 2.31 | 1.34 | 98.40 |
| | | | 31-Aug-10 | nm | nm | 2.35 | 1.38 | 98.37 |
| | | | 1-Oct-10 | <25 | nm | 2.10 | 1.12 | 98.62 |
| MW08-3 | 99.51 | 100.38 | 23-Jun-08 | <25 | nm | 1.62 | 0.75 | 98.76 |
| | | | 27-Jun-08 | nm | 1.2 | 1.63 | 0.76 | 98.75 |
| | | | 16-Sep-08 | nm | nm | 2.28 | 1.41 | 98.10 |
| | | | 5-Aug-09 | nm | nm | 1.74 | 0.87 | 98.64 |
| | 99.57 | 100.40 | 14-Aug-09 | <25 | nm | 1.89 | 1.07 | 98.50 |
| | | | 8-Sep-09 | nm | nm | 2.12 | 1.29 | 98.28 |
| | | | 20-Aug-10 | nm | nm | 2.12 | 1.29 | 98.28 |
| | ns | 100.40 | 26-Aug-10 | nm | 0.8 | 2.06 | 1.23 | 98.34 |
| | | | 31-Aug-10 | nm | nm | 2.09 | 1.26 | 98.31 |
| | | | 1-Oct-10 | <25 | nm | 1.84 | 1.01 | 98.56 |
| MW08-4 | 99.63 | 100.47 | 23-Jun-08 | <25 | nm | 1.66 | 0.82 | 98.81 |
| | | | 27-Jun-08 | nm | 2.2 | 1.64 | 0.80 | 98.83 |
| | | | 16-Sep-08 | nm | nm | 2.27 | 1.44 | 98.20 |
| | | | 5-Aug-09 | nm | nm | 1.73 | 0.89 | 98.74 |
| | 99.65 | 100.47 | 14-Aug-09 | <25 | nm | 1.92 | 1.10 | 98.55 |
| | | | 8-Sep-09 | nm | nm | 2.12 | 1.30 | 98.36 |
| | | | 20-Aug-10 | nm | nm | 2.11 | 1.28 | 98.37 |
| | ns | 100.48 | 26-Aug-10 | nm | 1.1 | 2.03 | 1.21 | 98.44 |
| | | | 31-Aug-10 | nm | nm | 2.09 | 1.26 | 98.39 |
| | | | 1-Oct-10 | <25 | nm | 1.75 | 0.93 | 98.72 |
| MW08-5 | 99.99 | 100.92 | 16-Sep-08 | nm | nm | 2.64 | 1.71 | 98.28 |
| | | | 5-Aug-09 | nm | nm | 2.07 | 1.14 | 98.85 |
| | | | 14-Aug-09 | 25 | nm | 2.26 | 1.33 | 98.66 |
| | | | 8-Sep-09 | nm | nm | 2.47 | 1.55 | 98.44 |
| | ns | 100.92 | 20-Aug-10 | nm | nm | 2.47 | 1.54 | 98.46 |
| | | | 26-Aug-10 | nm | 57 | 2.39 | 1.46 | 98.53 |
| | | | 31-Aug-10 | nm | nm | 2.44 | 1.51 | 98.48 |
| | | | 1-Oct-10 | <25 | nm | 2.13 | 1.20 | 98.79 |
| MW09-8 | 99.49 | 100.60 | 14-Aug-09 | 75 | nm | 2.13 | 1.02 | 98.47 |
| | | | 8-Sep-09 | nm | nm | 2.31 | 1.20 | 98.29 |
| | ns | 100.61 | 20-Aug-10 | nm | nm | 2.32 | 1.19 | 98.30 |
| | | | 26-Aug-10 | nm | 0.2 | 2.25 | 1.12 | 98.36 |
| | | | 1-Oct-10 | 100 | nm | 2.00 | 0.87 | 98.61 |

TABLE 1 GROUNDWATER LEVEL MONITORING SUMMARY
Former MNR Lease Lands, Leitrim Road, Ottawa, ON
(see end of table for footnotes)

| Monitoring Well | Ground Surface Elevation ¹ (m ald) | Top of PVC Casing Elevation ¹ (m ald) | Date | OMV Reading ² (ppmv) | PID Reading ³ (ppmv) | Water Level Depth (m btc) | Water Level Depth (m bgs) | Water Level Elevation ¹ (m ald) |
|-----------------|--|---|-----------|------------------------------------|------------------------------------|------------------------------|------------------------------|---|
| MW09-9 | ns | 100.34 | 14-Aug-09 | <25 | nm | 1.87 | 0.79 | 98.47 |
| | | | 8-Sep-09 | nm | nm | 2.07 | 1.00 | 98.26 |
| | | | 20-Aug-10 | nm | nm | 2.08 | 1.00 | 98.26 |
| | | | 26-Aug-10 | nm | 0.2 | 2.02 | 0.95 | 98.32 |
| | | | 1-Oct-10 | <25 | nm | 1.78 | 0.70 | 98.56 |
| MW10-10 | 99.29 | 100.45 | 26-Aug-10 | nm | 1.7 | 2.24 | 1.09 | 98.20 |
| | | | 31-Aug-10 | nm | nm | 2.29 | 1.14 | 98.16 |
| | | | 1-Oct-10 | <25 | nm | 1.96 | 0.81 | 98.48 |
| MW10-11 | 99.22 | 100.32 | 26-Aug-10 | nm | 0.7 | 2.097 | 0.99 | 98.22 |
| | | | 31-Aug-10 | nm | nm | 2.13 | 1.03 | 98.19 |
| | | | 1-Oct-10 | <25 | nm | 1.832 | 0.73 | 98.49 |
| MW10-12 | 99.07 | 100.20 | 26-Aug-10 | nm | 0.5 | 1.973 | 0.85 | 98.23 |
| | | | 31-Aug-10 | nm | nm | 2.011 | 0.88 | 98.19 |
| | | | 1-Oct-10 | <25 | nm | 1.718 | 0.59 | 98.48 |
| MW10-13 | 99.69 | 100.79 | 26-Aug-10 | nm | 2.5 | 2.723 | 1.62 | 98.07 |
| | | | 31-Aug-10 | nm | nm | 2.724 | 1.62 | 98.07 |
| | | | 1-Oct-10 | <25 | nm | 2.497 | 1.40 | 98.29 |
| MW10-14 | 99.86 | 100.93 | 26-Aug-10 | nm | 4 | 2.748 | 1.68 | 98.18 |
| | | | 31-Aug-10 | nm | nm | 2.779 | 1.71 | 98.15 |
| | | | 1-Oct-10 | <25 | nm | 2.504 | 1.43 | 98.42 |
| MW10-15 | 99.83 | 100.86 | 26-Aug-10 | nm | 11.6 | 2.71 | 1.68 | 98.15 |
| | | | 31-Aug-10 | nm | nm | 2.732 | 1.70 | 98.13 |
| | | | 1-Oct-10 | <25 | nm | 2.475 | 1.45 | 98.38 |
| MW10-16 | 99.75 | 100.60 | 1-Oct-10 | 30 | nm | 2.388 | 1.54 | 98.22 |
| MW10-17 | 99.87 | 100.94 | 1-Oct-10 | 30 | nm | 2.813 | 1.73 | 98.13 |
| MW10-18 | 99.56 | 100.67 | 1-Oct-10 | 290 | nm | 2.574 | 1.46 | 98.10 |
| MW10-19 | 99.67 | 100.74 | 1-Oct-10 | 125 | nm | 2.54 | 1.48 | 98.20 |
| MW10-20 | 99.75 | 100.88 | 1-Oct-10 | 290 | nm | 2.665 | 1.54 | 98.21 |
| MW10-21 | 98.66 | 99.83 | 1-Oct-10 | 55 | nm | 1.899 | 0.73 | 97.93 |
| MW10-22 | 98.02 | 99.17 | 1-Oct-10 | 90 | nm | 1.358 | 0.20 | 97.81 |
| MW10-23 | 98.41 | 99.55 | 1-Oct-10 | <25 | nm | 1.641 | 0.50 | 97.90 |
| MW10-24 | 99.95 | 101.23 | 1-Oct-10 | 220 | nm | 3.181 | 1.91 | 98.05 |
| MW10-25 | 99.48 | 100.65 | 1-Oct-10 | <25 | nm | 2.673 | 1.50 | 97.98 |

Notes:

¹ Elevations measured on June 18, 2008 relative to local benchmark (SW corner of concrete slab east side of gate) having an assigned elevation of 100.00m ald. Elevations were resurveyed on September 8, 2009, August 26, 2010, and October 1, 2010.

² Organic Vapour Meter (OMV) readings measured in ppmv unless noted

³ Photo Ionization Detector (PID) readings measured in ppmv unless noted

(m ald) metres above local datum

(m btc) metres below top of PVC casing

(m bgs) metres below ground surface

ppmv parts per million by volume

ns not surveyed

nm not measured

TABLE 2 SOIL ANALYTICAL RESULTS
Volatile Organic Compounds
NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Guideline Res./Park. ² | BH-10-15-5 |
|---|-----|----------|---|--|------------------|
| <i>Laboratory Sample No.</i> | na | na | na | na | <i>L60017</i> |
| <i>Sampling Date</i> | na | na | na | na | <i>26-Aug-10</i> |
| <i>Sample Location</i> | na | na | na | na | BH-10-15-5 |
| <i>Sample Depth</i> | na | m bgs | na | na | 2.44 to 3.04 |
| <i>PID Reading</i> | na | see note | na | na | 104 |
| Benzene | 0.1 | µg/g | 0.24 | 0.030 | < |
| Carbon Tetrachloride | 0.1 | µg/g | 0.10 | 5 | < |
| Chlorobenzene | 0.2 | µg/g | 2.4 | 1 | < |
| Chloroform | 0.2 | µg/g | 0.13 | 5 | < |
| 1,2-Dichlorobenzene | 0.2 | µg/g | 0.88 | 1 | < |
| 1,3-Dichlorobenzene | 0.2 | µg/g | 30 | 1 | < |
| 1,4-Dichlorobenzene | 0.2 | µg/g | 0.32 | 1 | < |
| 1,1-Dichloroethane | 0.2 | µg/g | 3.0 | 5 | < |
| 1,2-Dichloroethane | 0.2 | µg/g | 0.022 | 5 | < |
| 1,1-Dichloroethylene | 0.2 | µg/g | 0.0024 | 5 | < |
| 1,2-Dichloroethylene (cis+trans) | 0.1 | µg/g | ns | 5 | < |
| Dichloromethane | 0.2 | µg/g | 1.1 | 5 | < |
| 1,2-Dichloropropane | 0.2 | µg/g | 0.019 | 5 | < |
| 1,3-Dichloropropene (cis+trans) | 0.1 | µg/g | 0.0066 | ng | < |
| Ethylbenzene | 0.2 | µg/g | 0.28 | 0.082 | < |
| Styrene | 0.2 | µg/g | 1.2 | 5 | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/g | 0.01 | 5 | < |
| Tetrachloroethylene | 0.2 | µg/g | 0.45 | 0.2 | < |
| 1,1,1-Trichloroethane | 0.2 | µg/g | 26 | 5 | < |
| 1,1,2-Trichloroethane | 0.2 | µg/g | 0.28 | 5 | < |
| Trichloroethylene | 0.2 | µg/g | 1.1 | 0.01 | < |
| Toluene | 0.2 | µg/g | 2.1 | 0.37 | < |
| Vinyl Chloride | 0.2 | µg/g | 0.003 | ng | < |
| Xylene (Total) | 0.2 | µg/g | 25 | 11 | < |

RDL reportable detection limit unless noted

< less than RDL

na not applicable

ng no guideline

µg/g micrograms per gram

PID Reading photo ionization detector reading (in ppmv unless noted)

ppmv parts per million by volume

m bgs metres below ground surface

¹ Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use, coarse textured soils (MOE, 2004)

² Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, Canadian Environmental Quality Guidelines (CCME, 1999 as updated)

BOLD Exceeds MOE Table 2 soil standard

BOLD Exceeds CCME residential/parkland guidelines

TABLE 3 GROUNDWATER ANALYTICAL RESULTS - DRIVEPOINTS
Volatile Organic Parameters
NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard | CCME Community | 2010 FIGQGs Table 2 | DP-10-23 | DP-10-24 | DP-10-25 | DP-10-26 |
|------------------------------------|-----|-------|----------------------|--------------------|------------------------|-----------|-----------|-----------|-----------|
| | RDL | Units | Table 2 ¹ | Water ² | Tier 1 ⁴ | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | GY6664 | GY6665 | GY6666 | GY6667 |
| <i>Sampling Date</i> | na | na | na | na | na | 26-Aug-10 | 26-Aug-10 | 26-Aug-10 | 26-Aug-10 |
| <i>Drivepoint No.</i> | na | na | na | na | na | DP-10-23 | DP-10-24 | DP-10-25 | DP-10-26 |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | 0.6 | < | < | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 3.4 | 0.2 | < | < |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | 0.4 | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 19 | 0.6 | < | < |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| Vinyl Chloride | 0.2 | µg/L | 0.5 | 2 | 1.1 | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | < | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)

² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)

³ Aesthetic Objective

⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)

BOLD Exceeds MOE (2004) Table 2 groundwater standard

Italic Exceeds CCME (1999 as updated) drinking water quality guidelines

Underline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 3 GROUNDWATER ANALYTICAL RESULTS - DRIVEPOINTS
Volatile Organic Parameters
NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard | CCME Community | 2010 FIGQGs Table 2 | DP-10-27 | DP-10-28 | DP-10-29 | DP-10-30 |
|------------------------------------|-----|-------|----------------------|--------------------|------------------------|-----------|-----------|-----------|-----------|
| | RDL | Units | Table 2 ¹ | Water ² | Tier 1 ⁴ | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | GY6668 | GY6669 | GY6670 | GY6671 |
| <i>Sampling Date</i> | na | na | na | na | na | 26-Aug-10 | 26-Aug-10 | 26-Aug-10 | 26-Aug-10 |
| <i>Drivepoint No.</i> | na | na | na | na | na | DP-10-27 | DP-10-28 | DP-10-29 | DP-10-30 |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | 0.7 | 0.1 |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | 0.1 | 0.2 |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | < | < | 9.1 | 1.5 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | 3.2 | 0.4 |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | < | 0.6 | 47 | 32 |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| Vinyl Chloride | 0.2 | µg/L | 0.5 | 2 | 1.1 | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | < | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)

² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)

³ Aesthetic Objective

⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)

BOLD Exceeds MOE (2004) Table 2 groundwater standard

Italic Exceeds CCME (1999 as updated) drinking water quality guidelines

Underline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 3 GROUNDWATER ANALYTICAL RESULTS - DRIVEPOINTS
Volatile Organic Parameters
NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard | CCME Community | 2010 FIGQGs Table 2 | DP-10-31 | DP-10-33 | DP-10-34 |
|------------------------------------|-----|-------|----------------------|--------------------|------------------------|-----------|-----------|-----------|
| | RDL | Units | Table 2 ¹ | Water ² | Tier 1 ⁴ | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | GY6672 | GY6673 | GY6685 |
| <i>Sampling Date</i> | na | na | na | na | na | 26-Aug-10 | 26-Aug-10 | 26-Aug-10 |
| <i>Drivepoint No.</i> | na | na | na | na | na | DP-10-31 | DP-10-33 | DP-10-34 |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | 0.2 | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 0.1 | < | 0.1 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 0.1 | 3.7 | 5.1 |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < |
| Vinyl Chloride | 0.2 | µg/L | 0.5 | 2 | 1.1 | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)

² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)

³ Aesthetic Objective

⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)

BOLD Exceeds MOE (2004) Table 2 groundwater standard

Italic Exceeds CCME (1999 as updated) drinking water quality guidelines

Underline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 3 GROUNDWATER ANALYTICAL RESULTS - DRIVEPOINTS
Volatile Organic Parameters
NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard | CCME Community | 2010 FIGQGs Table 2 | DP-10-99 Field Duplicate of | DP-10-35 | RINSE BLANK |
|------------------------------------|-----|-------|----------------------|--------------------|------------------------|-----------------------------------|------------------|--------------------|
| | RDL | Units | Table 2 ¹ | Water ² | Tier 1 ⁴ | DP-10-34 | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>GY6686</i> | <i>GY6687</i> | <i>GY6688</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>26-Aug-10</i> | <i>26-Aug-10</i> | <i>26-Aug-10</i> |
| <i>Drivepoint No.</i> | na | na | na | na | na | <i>DP-10-34</i> | <i>DP-10-35</i> | <i>RINSE BLANK</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 0.1 | < | < |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 4.3 | < | < |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < |
| Vinyl Chloride | 0.2 | µg/L | 0.5 | 2 | 1.1 | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)

² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)

³ Aesthetic Objective

⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)

BOLD Exceeds MOE (2004) Table 2 groundwater standard

Italic Exceeds CCME (1999 as updated) drinking water quality guidelines

Underline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Community Water ² | 2010 FIGQGs Table 2 Tier 1 ⁴ | MW-09-8 | MW-09-9 | MW-10-10 | MW-10-10 |
|------------------------------------|-----|-------|---|---|---|-----------|-----------|-----------|----------|
| | RDL | Units | | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | GY9187 | GY9188 | GY9189 | HJ9172 |
| <i>Sampling Date</i> | na | na | na | na | na | 27-Aug-10 | 27-Aug-10 | 27-Aug-10 | 1-Oct-10 |
| <i>Monitoring Well No.</i> | na | na | na | na | na | MW-09-8 | MW-09-9 | MW-10-10 | MW-10-10 |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | < | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 0.2 | < | 0.3 | 0.2 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 13 | 0.2 | 4.0 | 4.0 |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | 0.1 | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | 0.1 | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Community Water ² | 2010 FIGQGs Table 2 Tier 1 ⁴ | MW-10-11 | MW-10-11 | MW-10-12 | MW-10-13 |
|------------------------------------|-----|-------|---|---|---|------------------|-----------------|------------------|------------------|
| | RDL | Units | | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>GY9191</i> | <i>HJ9173</i> | <i>GY9192</i> | <i>GY9193</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>27-Aug-10</i> | <i>1-Oct-10</i> | <i>27-Aug-10</i> | <i>27-Aug-10</i> |
| <i>Monitoring Well No.</i> | na | na | na | na | na | <i>MW-10-11</i> | <i>MW-10-11</i> | <i>MW-10-12</i> | <i>MW-10-13</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | 0.1 | 0.1 | < | 0.9 |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | < | 0.2 |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 3.7 | 3.6 | < | 1.7 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | 0.8 | 0.6 | < | 0.5 |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | 0.2 | < | 0.2 | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 4.9 | 5.4 | < | 17 |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | 0.1 | < | 0.1 | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | 0.1 | < | 0.1 | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Community Water ² | 2010 FIGQGs Table 2 Tier 1 ⁴ | MW-10-13 | MW-10-14 | MW-10-15 | MW-10-99 Field Duplicate of MW-10-15 |
|------------------------------------|-----|-------|---|---|---|-----------------|------------------|------------------|---|
| | RDL | Units | | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>HJ9174</i> | <i>GY9194</i> | <i>GY9190</i> | <i>GY9195</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>1-Oct-10</i> | <i>27-Aug-10</i> | <i>27-Aug-10</i> | <i>27-Aug-10</i> |
| <i>Monitoring Well No.</i> | na | na | na | na | na | <i>MW-10-13</i> | <i>MW-10-14</i> | <i>MW-10-15</i> | <i>MW-10-15</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | 0.7 | < | < | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | 0.2 | < | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 1.5 | < | 0.3 | 0.3 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | 0.3 | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | < | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | < | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 14 | < | 2.0 | 2.1 |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | < | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | < | < |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Community Water ² | 2010 FIGQGs Table 2 Tier 1 ⁴ | MW-10-15 | MW-10-16 | MW-10-17 | MW-10-18 |
|------------------------------------|-----|-------|---|---|---|-----------------|-----------------|-----------------|-----------------|
| | RDL | Units | | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>HJ9175</i> | <i>HJ9176</i> | <i>HJ9177</i> | <i>HJ9178</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> |
| <i>Monitoring Well No.</i> | na | na | na | na | na | <i>MW-10-15</i> | <i>MW-10-16</i> | <i>MW-10-17</i> | <i>MW-10-18</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | 1.5 | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | 0.3 | 0.3 | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | 0.7 | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | 0.1 | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | 0.3 | 0.1 | 5.2 | < |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | 0.9 | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | < | < | 0.4 | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | < | < | 1.3 | < |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | 2.1 | < | 5.5 | < |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | 1.5 | 0.2 |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | < | < | 0.7 | < |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | < | < | 2.2 | 0.2 |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard | CCME Community | 2010 FIGQGs Table 2 | MW-10-98 Field Duplicate of | MW-10-19 | MW-10-20 | MW-10-21 |
|------------------------------------|-----|-------|----------------------|--------------------|------------------------|-----------------------------------|-----------------|-----------------|-----------------|
| | RDL | Units | Table 2 ¹ | Water ² | Tier 1 ⁴ | MW-10-18 | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>HJ9179</i> | <i>HJ9180</i> | <i>HJ9181</i> | <i>HJ9182</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> |
| <i>Monitoring Well No.</i> | na | na | na | na | na | <i>MW-10-18</i> | <i>MW-10-19</i> | <i>MW-10-20</i> | <i>MW-10-21</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | 0.2 | < |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | < | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | < | < | 0.3 | < |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | 0.4 | < | 0.2 | < |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | 1.7 | < | 0.7 | 0.2 |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | < | < | 0.1 | < |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | 1.7 | 0.2 | 0.8 | 0.3 |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | 0.8 | 0.1 | 0.4 | 0.1 |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | 2.6 | 0.3 | 1.2 | 0.5 |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - MONITORING WELLS

Volatile Organic Parameters

NCC Property Asset No. 97390, Leitrim Road, Ottawa, Ontario

| SNC-Lavalin Environment Sample No. | | | MOE Standard Table 2 ¹ | CCME Community Water ² | 2010 FIGQGs Table 2 Tier 1 ⁴ | MW-10-22 | MW-10-23 | MW-10-24 | MW-10-25 |
|------------------------------------|-----|-------|---|---|---|-----------------|-----------------|-----------------|-----------------|
| | RDL | Units | | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | na | na | na | <i>HJ9183</i> | <i>HJ9184</i> | <i>HJ9185</i> | <i>HJ9186</i> |
| <i>Sampling Date</i> | na | na | na | na | na | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> | <i>1-Oct-10</i> |
| <i>Monitoring Well No.</i> | na | na | na | na | na | <i>MW-10-22</i> | <i>MW-10-23</i> | <i>MW-10-24</i> | <i>MW-10-25</i> |
| Acetone | 10 | µg/L | 3000 | ng | 330 | < | < | < | < |
| Benzene | 0.1 | µg/L | 5.0 | 5 | 140 | < | < | < | 0.1 |
| Bromodichloromethane | 0.1 | µg/L | 5.0 | 16 | 67000 | < | < | < | < |
| Bromoform | 0.2 | µg/L | 5.0 | ng | 840 | < | < | < | < |
| Bromomethane | 0.5 | µg/L | 3.7 | ng | 2 | < | < | < | < |
| Carbon Tetrachloride | 0.1 | µg/L | 5.0 | 5 | 0.56 | < | < | < | < |
| Chlorobenzene | 0.1 | µg/L | 30 | 80 | 1.3 | < | < | < | < |
| Chloroform | 0.1 | µg/L | 5.0 | ng | 1.8 | < | < | < | < |
| Dibromochloromethane | 0.2 | µg/L | 5.0 | ng | 1100 | < | < | < | < |
| 1,2-Dichlorobenzene | 0.2 | µg/L | 3.0 | 200 | 0.7 | < | < | < | < |
| 1,3-Dichlorobenzene | 0.2 | µg/L | 630 | ng | 42 | < | < | < | < |
| 1,4-Dichlorobenzene | 0.2 | µg/L | 1.0 | 5 | 26 | < | < | < | < |
| Dichlorodifluoromethane (FREON 12) | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| 1,1-Dichloroethane | 0.1 | µg/L | 70 | ng | 9000 | < | < | 0.2 | < |
| 1,2-Dichloroethane | 0.2 | µg/L | 5.0 | 5 | 10 | < | < | < | < |
| 1,1-Dichloroethylene | 0.1 | µg/L | 0.66 | 14 | 39 | < | < | < | < |
| cis-1,2-Dichloroethylene | 0.1 | µg/L | 70 | ng | 12000 | < | < | 0.1 | 0.3 |
| trans-1,2-Dichloroethylene | 0.1 | µg/L | 100 | ng | 12000 | < | < | < | < |
| 1,2-Dichloropropane | 0.1 | µg/L | 5.0 | ng | 9.3 | < | < | < | < |
| cis-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| trans-1,3-Dichloropropene | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| 1,3-Dichloropropene | 0.2 | µg/L | 1.4 | ng | 3.8 | < | < | < | < |
| Ethylbenzene | 0.1 | µg/L | 2.4 | 2.4 ³ | 11000 | 0.1 | < | < | 0.1 |
| Ethylene Dibromide | 0.2 | µg/L | 1.0 | ng | 3.3 | < | < | < | < |
| Hexane | 0.5 | µg/L | ns | ng | ng | < | < | < | < |
| Methyl Ethyl Ketone | 5 | µg/L | 350 | ng | 120000 | < | < | < | < |
| Methyl Isobutyl Ketone | 5 | µg/L | 350 | ng | 57000 | < | < | < | < |
| Methyl t-butyl ether | 0.2 | µg/L | 700 | 15 ³ | 340 | < | < | < | < |
| Methylene Chloride | 0.5 | µg/L | 50 | 50 | 98 | < | < | < | < |
| Styrene | 0.2 | µg/L | 100 | ng | 72 | < | < | < | < |
| 1,1,1,2-Tetrachloroethane | 0.1 | µg/L | 5.0 | ng | 6 | < | < | < | < |
| 1,1,2,2-Tetrachloroethane | 0.2 | µg/L | 1.0 | ng | 22 | < | < | < | < |
| Tetrachloroethylene | 0.1 | µg/L | 5.0 | 30 | 110 | < | < | < | < |
| Toluene | 0.2 | µg/L | 24 | 24 ³ | 83 | 0.4 | < | < | 0.4 |
| 1,1,1-Trichloroethane | 0.1 | µg/L | 200 | ng | 4200 | < | < | < | < |
| 1,1,2-Trichloroethane | 0.2 | µg/L | 5.0 | ng | 9400 | < | < | < | < |
| Trichloroethylene | 0.1 | µg/L | 50 | 5 | 20 | < | < | < | < |
| Trichlorofluoromethane (FREON 11) | 0.2 | µg/L | ns | ng | ng | < | < | < | < |
| p+m-Xylene | 0.1 | µg/L | ns | ng | ng | 0.5 | 0.3 | < | 0.6 |
| o-Xylene | 0.1 | µg/L | ns | ng | ng | 0.2 | 0.1 | < | 0.3 |
| Xylene (Total) | 0.1 | µg/L | 300 | 300 ³ | 3900 | 0.7 | 0.4 | < | 0.9 |

RDL reportable detection limit

< less than RDL

na not applicable

ns no standards

ng no guideline

µg/L micrograms per litre

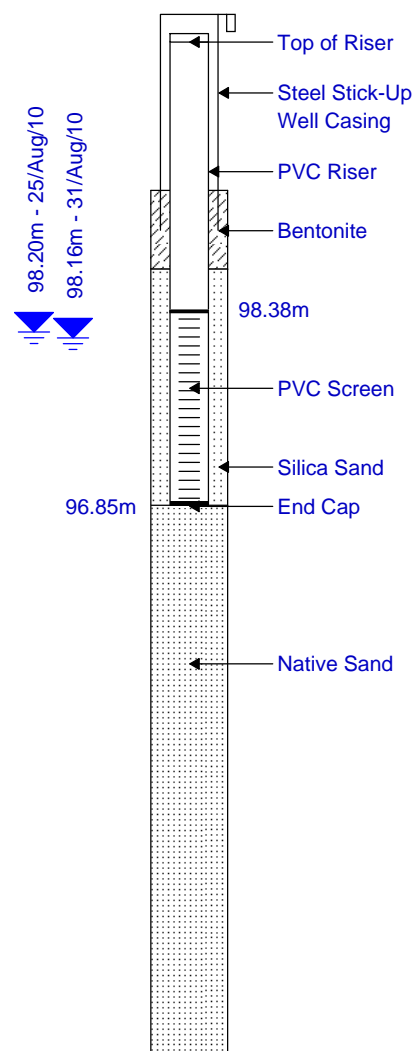
¹ MOE Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use, coarse textured soils (MOE, 2004)² Guidelines for Canadian Drinking Water Quality, Community Water Supplies, Canadian Environmental Quality Guidelines (CCME, 1999, as updated)³ Aesthetic Objective⁴ FIGQGs Table 2, Tier 1: Generic Guidelines for residential/parkland use and coarse textured soils (FIGQG, 2010)**BOLD** Exceeds MOE (2004) Table 2 groundwater standard*Italic* Exceeds CCME (1999 as updated) drinking water quality guidelinesUnderline Exceeds FIGQGs (2010) Table 2, Tier 1

APPENDIX A

BOREHOLE LOGS

| | | |
|--|---|--|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: August 25, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: MiniRAE 2000 PID |
|--|---|--|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.45m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|-----------------------------|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 99.29 | |
| 1 | - | BH-10-10-1 | | - | 1.0 | 76% | | SAND | 99.00 | |
| 2 | | | | | | | | dry, dark brown/light grey, | | |
| 3 | 1 | BH-10-10-2 | | - | 1.6 | 78% | | medium, some peat | | |
| 4 | | | | | | | | moist | | |
| 5 | | BH-10-10-3 | | - | 1.6 | 78% | | wet, brownish-grey | 98.00 | |
| 6 | | | | | | | | | | |
| 7 | 2 | BH-10-10-4 | | - | 1.9 | 52% | | | | |
| 8 | | | | | | | | | | |
| 9 | | BH-10-10-5 | | - | 2.0 | 52% | | trace gravel | 97.00 | |
| 10 | 3 | | | | | | | | | |
| 11 | | BH-10-10-6 | | - | 2.5 | 76% | | CLAY | 96.00 | |
| 12 | | | | | | | | wet, light grey, some fine | | |
| 13 | 4 | BH-10-10-7 | | - | 2.3 | 76% | | sand | | |
| 14 | | | | | | | | SAND | | |
| 15 | | | | | | | | wet, dark brown, fine | | |
| 16 | | | | | | | | No recovery | 95.00 | |
| 17 | 5 | | | - | - | 0% | | | | |
| 18 | | | | | | | | | | |
| 19 | | BH-10-10-8 | | - | 4.9 | 100% | | CLAY | 93.00 | |
| 20 | 6 | | | | | | | wet, light grey, some fine | | |
| 21 | | BH-10-10-9 | | - | 3.5 | 100% | | sand | | |
| 22 | | | | | | | | trace sand | | |
| | | | | | | | | End of borehole at 6.7m bgs | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

Project No.: 10-730

SLE Supervisor: Tina Stone

Drilling Company: Strata Soil Sampling

Client: National Capital Commission

Drilling Method: Direct Push

Drilling Equipment: Geoprobe 420 M

Location: Parking Lot 19, Leirtrim Road

Borehole Diameter: 57mm

Well Casing: 100mm Steel Stick Up (locked)

Date Completed: August 25, 2010

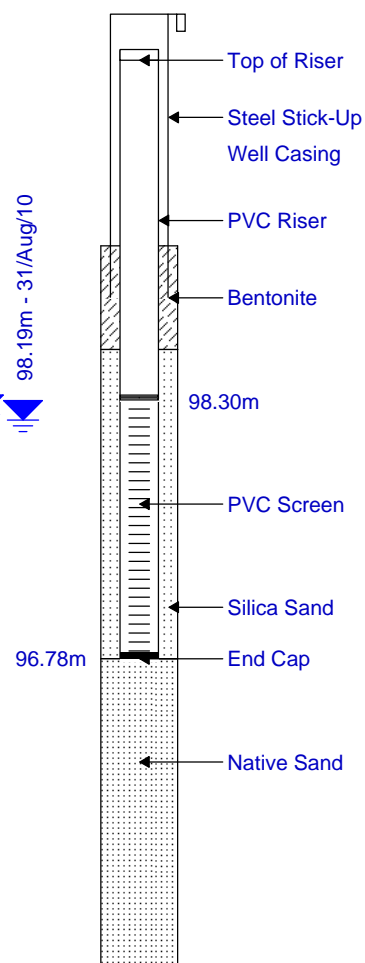
Monitoring Well Diameter: 38mm

Well Screen: PVC Schedule 40 Slot 10

Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m

OVM: MiniRAE 2000 PID

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.32m |
|---------|----------------|------------|----------|---------|---------|--------------|-------------|--|---------------|------------------------------|
| -5 ft m | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 99.22 | |
| 1 | - | BH-10-11-1 | | - | 3.2 | 65% | | SAND dry, dark brown/grey, medium, some peat light grey | 99.00 | |
| 2 | | | | | | | | light brown | | |
| 3 | - | BH-10-11-2 | | - | 2.8 | 75% | | moist | | |
| 4 | | | | | | | | wet | | |
| 5 | - | BH-10-11-3 | | - | 2.2 | 75% | | | | |
| 6 | | | | | | | | light/dark brown, coarse | | |
| 7 | - | BH-10-11-4 | | - | 3.2 | 100% | | | | |
| 8 | | | | | | | | SILTY CLAY wet, light grey, 25mm silt seams at 2.8m and 2.9m | | |
| 9 | - | BH-10-11-5 | | - | 4.3 | 100% | | | | |
| 10 | | | | | | | | | | |
| 11 | - | BH-10-11-6 | | - | 4.9 | 66% | | SAND wet, brown, fine | | |
| 12 | | | | | | | | | | |
| 13 | - | BH-10-11-7 | | - | 2.8 | 66% | | | | |
| 14 | | | | | | | | SAND AND CLAY wet, dark brown to light grey, medium | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | | |
| 16 | | | | | | | | | | |

 98.22m - 25/Aug/10
 98.19m - 31/Aug/10


(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

Project No.: 10-730

Client: National Capital Commission

Location: Parking Lot 19, Leirtrim Road

Date Completed: August 25, 2010

Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m

SLE Supervisor: Tina Stone

Drilling Method: Direct Push

Borehole Diameter: 57.15mm

Monitoring Well Diameter: 38.10mm

Drilling Company: Strata Soil Sampling

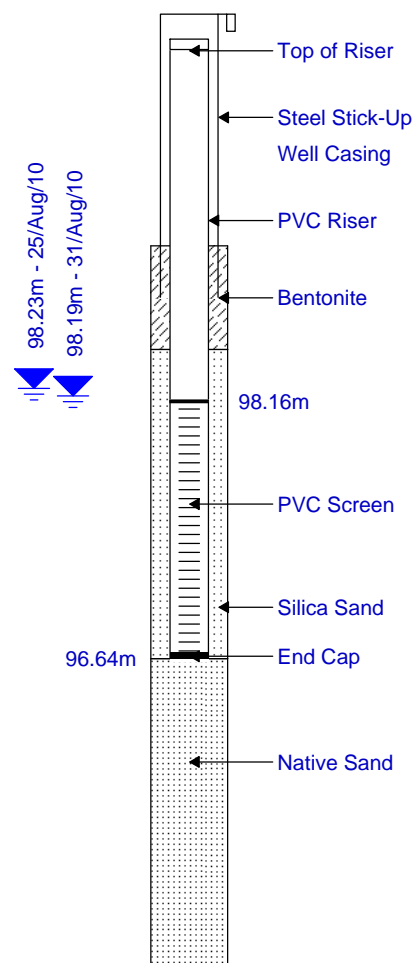
Drilling Equipment: Geoprobe 420 M

Well Casing: 100mm Steel Stick Up (locked)

Well Screen: PVC Schedule 40 Slot 10

OVM: MiniRAE 2000 PID

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.20m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | 0 | | | | | | | Ground Surface | 99.07 | |
| 1 | - | BH-10-12-1 | | - | 13.4 | 80% | | SAND dry to moist, dark brown/black to light brown/grey, medium, some peat, trace gravel | 99.00 | |
| 2 | | | | | | | | | | |
| 3 | - | BH-10-12-2 | | - | 1.6 | 73% | | | | |
| 4 | | | | | | | | moist, light brown/grey, trace gravel wet | 98.00 | |
| 5 | - | BH-10-12-3 | | - | 1.2 | 73% | | | | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-12-4 | | - | 1.1 | 100% | | trace coarse | 97.00 | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-12-5 | | - | 2.3 | 100% | | medium and coarse | | |
| 10 | | | | | | | | CLAY wet, light grey, trace silt 25mm silt seam at 2.9m | 96.00 | |
| 11 | - | BH-10-12-6 | | - | 2.4 | 100% | | SILTY CLAY wet, light grey, trace fine sand | | |
| 12 | | | | | | | | | | |
| 13 | - | BH-10-12-7 | | - | 2.2 | 100% | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | | |
| 16 | | | | | | | | | | |



- (1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

Project No.: 10-730

Client: National Capital Commission

Location: Parking Lot 19, Leirtrim Road

Date Completed: August 25, 2010

Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m

SLE Supervisor: Tina Stone

Drilling Method: Direct Push

Borehole Diameter: 57mm

Monitoring Well Diameter: 38mm

Drilling Company: Strata Soil Sampling

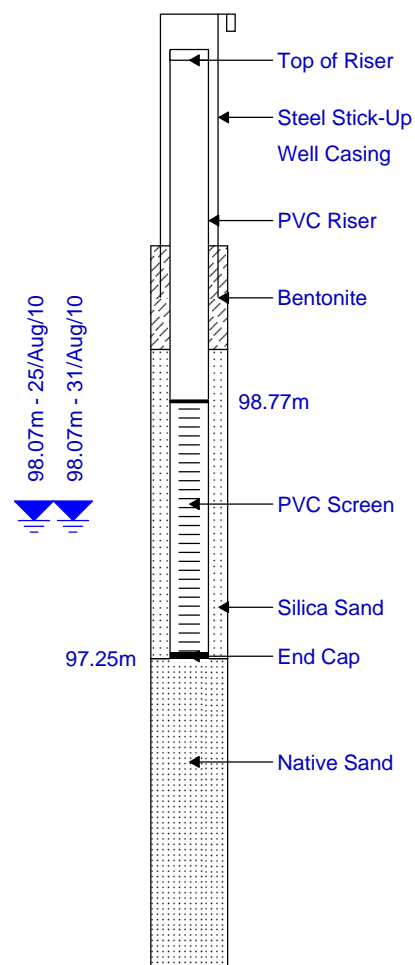
Drilling Equipment: Geoprobe 420 M

Well Casing: 100mm Steel Stick Up (locked)

Well Screen: PVC Schedule 40 Slot 10

OVM: MiniRAE 2000 PID

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.79m |
|---------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| -5 ft m | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | 100.00 | |
| 0 | | | | | | | | Ground Surface | 99.69 | |
| 1 | - | BH-10-13-1 | | - | 5.4 | 70% | | SAND dry, dark brown, medium, some organics | | |
| 2 | | | | | | | | moist, light brown | 99.00 | |
| 3 | - | BH-10-13-2 | | - | 2.6 | 75% | | | | |
| 4 | | | | | | | | CLAYEY SAND moist, light grey, medium | | |
| 5 | - | BH-10-13-3 | | - | 1.2 | 75% | | SAND wet, light brown, medium, trace gravel | 98.00 | |
| 6 | | | | | | | | light grey | | |
| 7 | - | BH-10-13-4 | | - | 1.5 | 66% | | | | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-13-5 | | - | 1.3 | 66% | | some coarse | 97.00 | |
| 10 | | | | | | | | SILTY CLAY wet, grey | | |
| 11 | - | BH-10-13-6 | | - | 1.4 | 100% | | | | |
| 12 | | | | | | | | | 96.00 | |
| 13 | - | BH-10-13-7 | | - | 1.4 | 100% | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | 95.00 | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

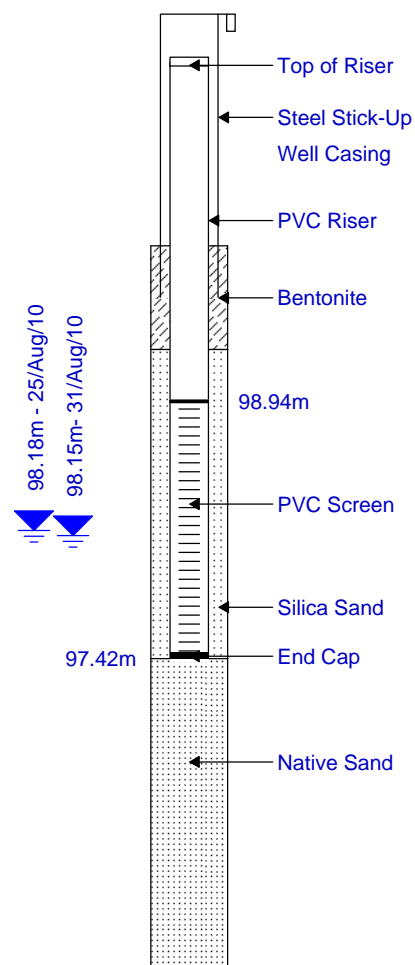
All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|---|---|--|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leirtrim Road Date Completed: August 25, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: MiniRAE 2000 PID |
|---|---|--|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.93m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | 101.00 | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 100.00 | |
| 1 | - | BH-10-14-1 | | - | 9.2 | 73% | | SAND dry, dark brown, medium, some peat | 99.86 | |
| 2 | | | | | | | | reddish brown, some coarse | | |
| 3 | - | BH-10-14-2 | | - | 7.6 | 76% | | light brown/grey | 99.00 | |
| 4 | | | | | | | | moist, trace coarse | | |
| 5 | - | BH-10-14-3 | | - | 2.1 | 76% | | wet | | |
| 6 | | | | | | | | | 98.00 | |
| 7 | - | BH-10-14-4 | | - | 1.4 | 82% | | | | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-14-5 | | - | 1.1 | 82% | | | | |
| 10 | | | | | | | | trace gravel | 97.00 | |
| 11 | - | BH-10-14-6 | | - | 1.2 | 100% | | CLAY | | |
| 12 | | | | | | | | wet, grey, some silt | | |
| 13 | - | BH-10-14-7 | | - | 1.3 | 100% | | SILTY CLAY | 96.00 | |
| 14 | | | | | | | | wet, light grey, 25mm silt seam at 4.1m | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | | |
| 16 | | | | | | | | | 95.00 | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

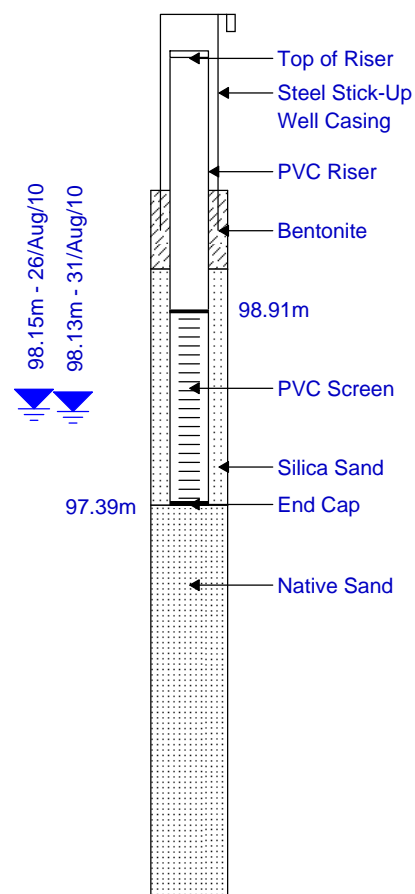
All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|--|---|--|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: August 26, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: MiniRAE 2000 PID |
|--|---|--|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.86m |
|---------|----------------|------------|----------|---------|---------|--------------|-------------|-----------------------------|---------------|------------------------------|
| -5 ft m | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 100.00 | |
| 1 | - | BH-10-15-1 | | - | 52 | 58% | | SAND | 99.83 | |
| 2 | | | | | | | | dry, dark brown to reddish | | |
| 3 | - | BH-10-15-2 | | - | 12 | 73% | | brown, medium, some | 99.00 | |
| 4 | | | | | | | | organics | | |
| 5 | - | BH-10-15-3 | | - | 59 | 73% | | moist, light brown | | |
| 6 | | | | | | | | wet, light brown/grey | 98.00 | |
| 7 | - | BH-10-15-4 | | - | 4.6 | 100% | | | | |
| 8 | | | | | | | | dark grey, some clay | | |
| 9 | - | BH-10-15-5 | | - | 104 | 100% | | no clay | 97.00 | |
| 10 | | | | | | | | some clay | | |
| 11 | - | BH-10-15-6 | | - | 2.1 | 100% | | | | |
| 12 | | | | | | | | SILTY CLAY | 96.00 | |
| 13 | - | BH-10-15-7 | | - | 1.9 | 100% | | wet, light grey | | |
| 14 | | | | | | | | | | |
| 15 | - | BH-10-15-8 | | - | 1.7 | 100% | | SILT | 95.00 | |
| 16 | | | | | | | | wet, dark grey | | |
| 17 | - | BH-10-15-9 | | - | 2.2 | 100% | | SILTY CLAY | | |
| 18 | | | | | | | | wet, light grey | | |
| 19 | | | | | | | | 25mm silt seam at 5.3 m | | |
| 20 | | | | | | | | | 94.00 | |
| 21 | | | | | | | | End of borehole at 5.5m bgs | | |
| 22 | | | | | | | | | 93.00 | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

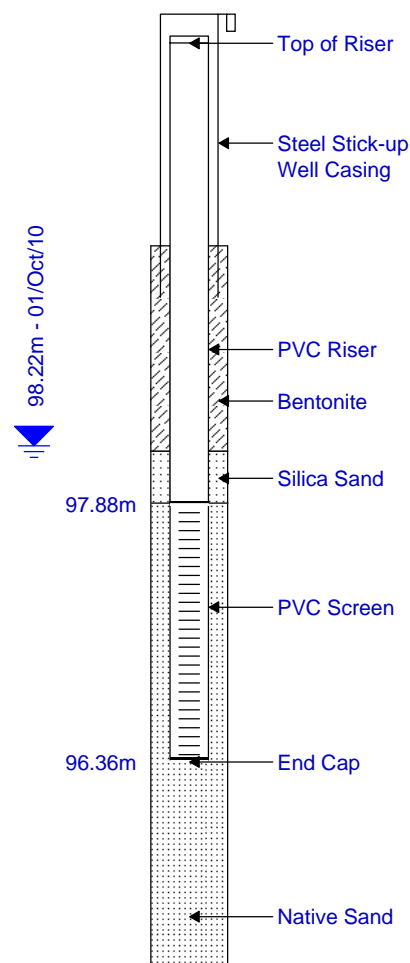
All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|--|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leirtrim Road Date Completed: September 28, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|--|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.60m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|--|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | 100.00 | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 99.40 | |
| 1 | - | BH-10-16-1 | | - | - | 43% | | SAND moist, dark brown, fine with trace organics | 99.00 | |
| 2 | | | | | | | | light brown, no organics | | |
| 3 | - | BH-10-16-2 | | - | - | 78% | | wet | | |
| 4 | | | | | | | | | | |
| 5 | - | BH-10-16-3 | | - | - | 78% | | dark brown | 98.00 | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-16-4 | | - | - | 45% | | | 97.00 | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-16-5 | | - | - | 45% | | | | |
| 10 | | | | | | | | | | |
| 11 | - | BH-10-16-6 | | - | - | 22% | | SILTY CLAY wet, grey | 96.00 | |
| 12 | | | | | | | | SAND wet, dark brown | | |
| 13 | - | BH-10-16-7 | | - | - | 22% | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | 95.00 | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

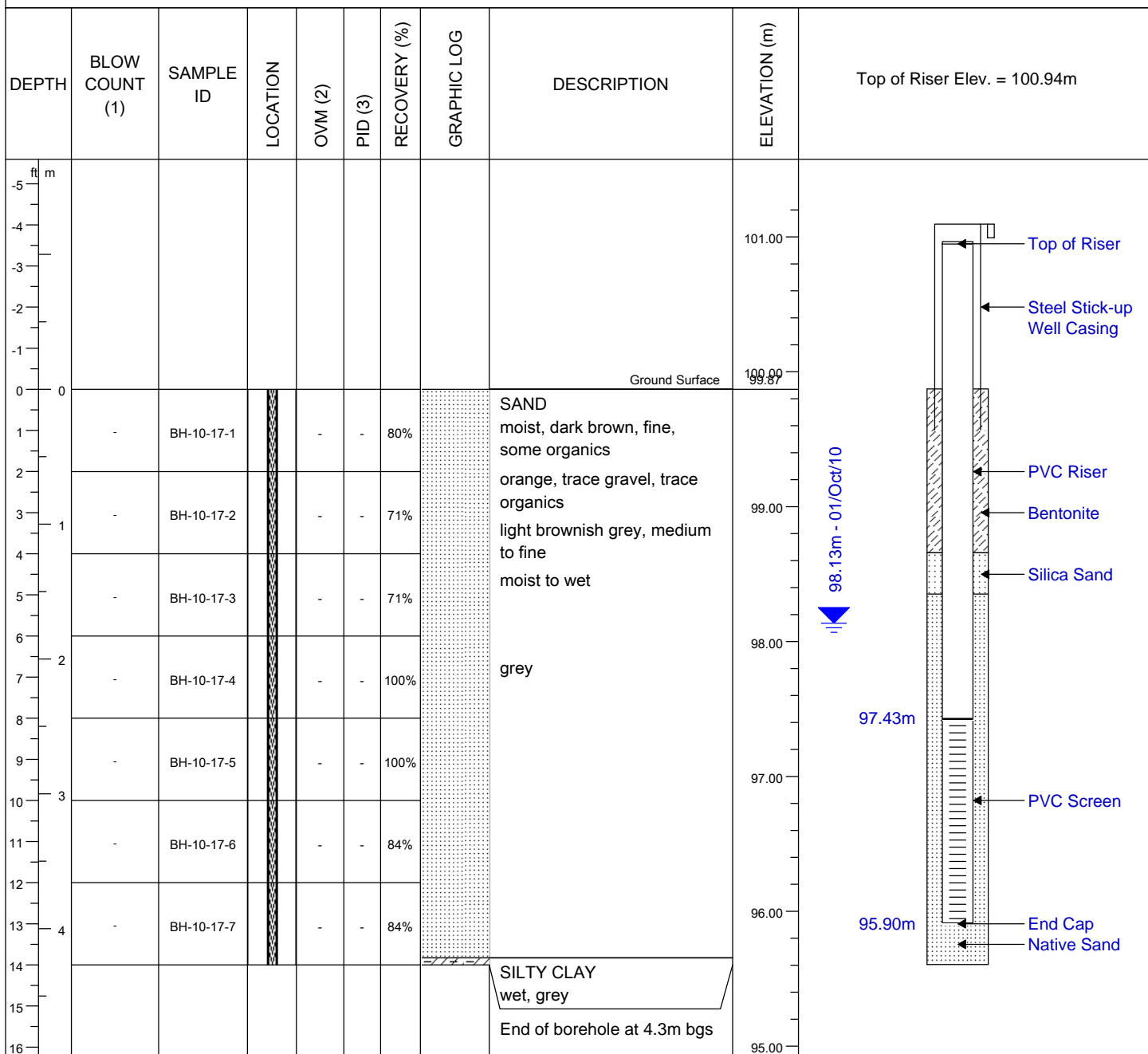
The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 28, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

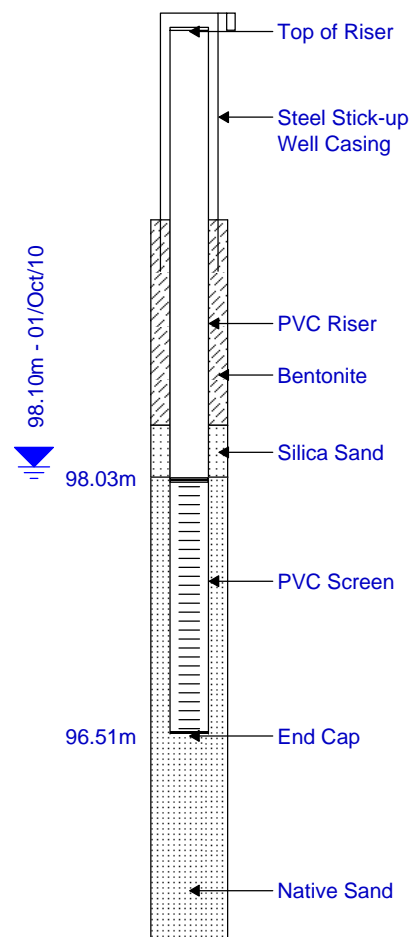
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

| | | |
|--|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leirtrim Road Date Completed: September 28, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|--|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.67m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 99.56 | |
| 1 | - | BH-10-18-1 | | - | - | 57% | | SAND moist, dark brown, fine, some organics | 99.00 | |
| 2 | | | | | | | | orangy brown, no organics | | |
| 3 | - | BH-10-18-2 | | - | - | 70% | | light grey, moist to wet | | |
| 4 | | | | | | | | | | |
| 5 | - | BH-10-18-3 | | - | - | 70% | | medium | 98.00 | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-18-4 | | - | - | 66% | | | | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-18-5 | | - | - | 66% | | SILTY CLAY wet, grey | 97.00 | |
| 10 | | | | | | | | | | |
| 11 | - | BH-10-18-6 | | - | - | 38% | | CAVE IN | 96.00 | |
| 12 | | | | | | | | | | |
| 13 | - | BH-10-18-7 | | - | - | 38% | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | 95.00 | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

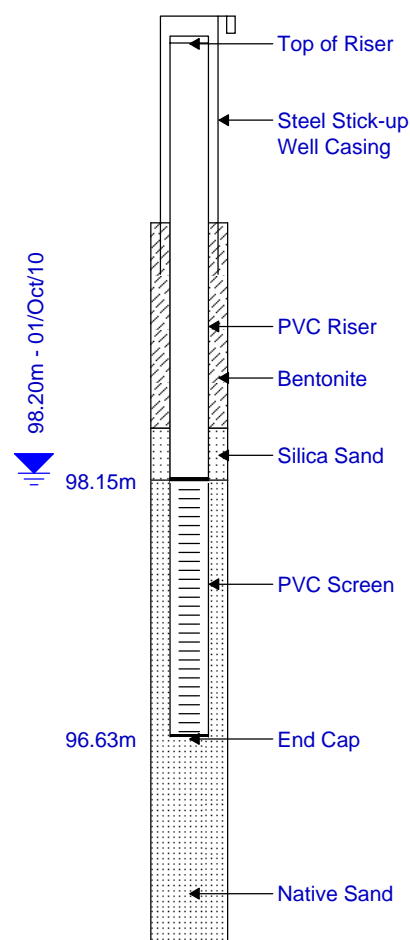
All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 28, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.74m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 100.00 | |
| 0 | | | | | | | | | 99.67 | |
| 1 | - | BH-10-19-1 | | - | - | 43% | | SAND moist, dark brown, fine, some organics orangy brown | 99.00 | |
| 2 | | | | | | | | | | |
| 3 | - | BH-10-19-2 | | - | - | 78% | | | | |
| 4 | | | | | | | | | | |
| 5 | - | BH-10-19-3 | | - | - | 78% | | wet, light brownish grey medium fine | 98.00 | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-19-4 | | - | - | 45% | | dark grey | | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-19-5 | | - | - | 45% | | SILTY CLAY wet, grey | 97.00 | |
| 10 | | | | | | | | | | |
| 11 | - | BH-10-19-6 | | - | - | 22% | | CAVE IN | | |
| 12 | | | | | | | | | | |
| 13 | - | BH-10-19-7 | | - | - | 22% | | | 96.00 | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | 95.00 | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

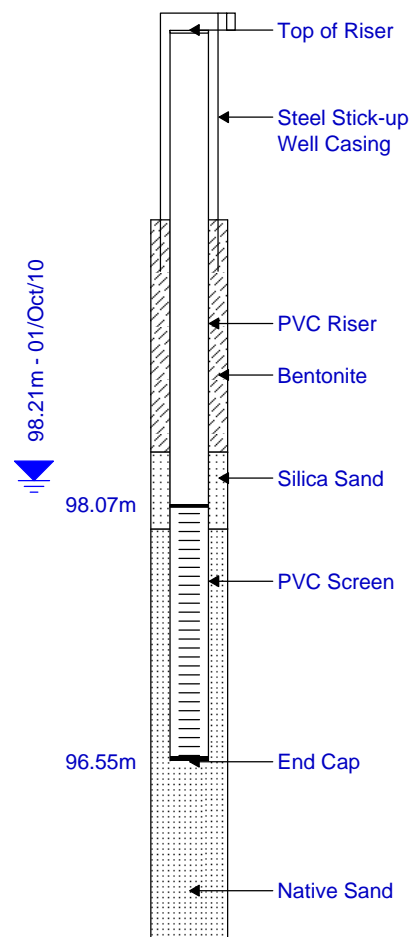
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 28, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.88m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|--|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | 101.00 | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | 100.00 | |
| 0 | | | | | | | | Ground Surface | 99.75 | |
| 1 | - | BH-10-20-1 | | - | - | 66% | | SAND moist, dark brown, fine, some organics | | |
| 2 | | | | | | | | orangy brown, no organics | 99.00 | |
| 3 | - | BH-10-20-2 | | - | - | 73% | | moist to wet, light brown | | |
| 4 | | | | | | | | Two 50mm grey, silty sand seams at 1.3m bgs | | |
| 5 | - | BH-10-20-3 | | - | - | 73% | | dark grey, fine to medium | 98.00 | |
| 6 | | | | | | | | light brownish grey, fine | | |
| 7 | - | BH-10-20-4 | | - | - | 100% | | | 97.00 | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-20-5 | | - | - | 100% | | | | |
| 10 | | | | | | | | | | |
| 11 | - | BH-10-20-6 | | - | - | 100% | | | 96.55m | |
| 12 | | | | | | | | | | |
| 13 | - | BH-10-20-7 | | - | - | 100% | | SILTY CLAY wet, grey 50mm silt seams at 3.9m and 4.0m bgs | 96.00 | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | End of borehole at 4.3m bgs | 95.00 | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

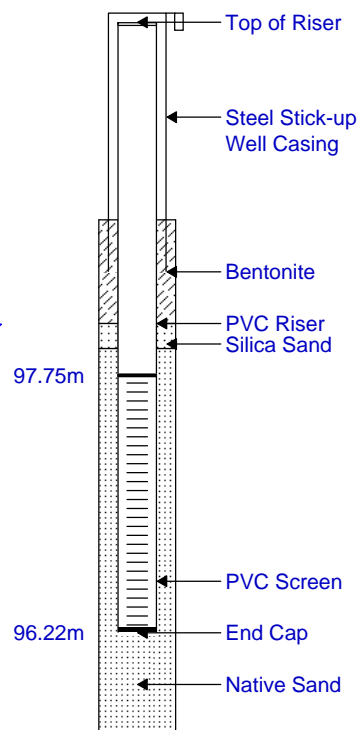
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 29, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 99.83m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|-----------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 98.66 | |
| 1 | - | BH-10-25-1 | | - | - | 71% | | SAND moist, dark brown, fine, some organics | | |
| 2 | | | | | | | | light brown, no organics | 98.00 | |
| 3 | - | BH-10-25-2 | | - | - | 81% | | light brownish grey wet | | |
| 4 | | | | | | | | | | |
| 5 | - | BH-10-25-3 | | - | - | 81% | | SILTY CLAY wet, grey 12mm wet, grey silt seam at 1.4m gs | 97.00 | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-25-4 | | - | - | 100% | | CAVE IN | | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-25-5 | | - | - | 100% | | | 96.00 | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | End of borehole at 3.1m bgs | | |
| 12 | | | | | | | | | 95.00 | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | 94.00 | |

97.93m - 01/Oct/10



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

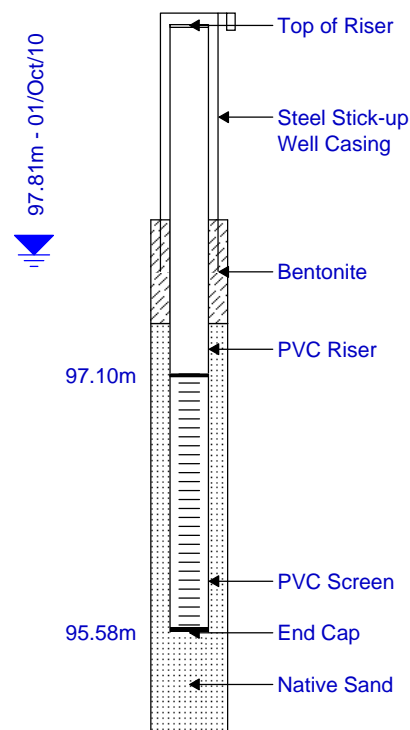
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 29, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 99.17m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|-----------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 98.02 | |
| 1 | - | BH-10-22-1 | | - | - | 60% | | SAND moist, dark brown, fine, some organics | 98.00 | |
| 2 | | | | | | | | light brown, no organics | | |
| 3 | - | BH-10-22-2 | | - | - | 42% | | dark brownish grey, medium | 97.00 | |
| 4 | | | | | | | | | | |
| 5 | - | BH-10-22-3 | | - | - | 42% | | SILTY CLAY wet, grey | | |
| 6 | | | | | | | | | | |
| 7 | - | BH-10-22-4 | | - | - | 100% | | | 96.00 | |
| 8 | | | | | | | | | | |
| 9 | - | BH-10-22-5 | | - | - | 100% | | | | |
| 10 | | | | | | | | | 95.00 | |
| 11 | | | | | | | | End of borehole at 3.1m bgs | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

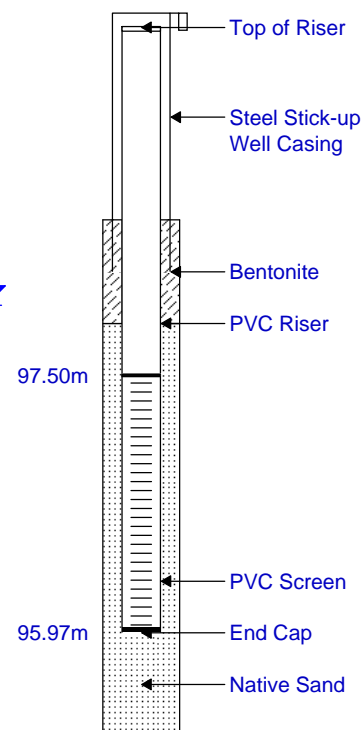
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 29, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 99.55m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|-----------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | 0 | | | | | | | Ground Surface | 98.41 | |
| 1 | - | BH-10-23-1 | | - | - | 76% | | SAND moist, dark brown, fine, some organics | 98.00 | |
| 2 | | | | | | | | orangi brown, no organics | | |
| 3 | 1 | BH-10-23-2 | | - | - | 66% | | wet, light bownish grey | | |
| 4 | | | | | | | | some rust coloured staining/oxidation | | |
| 5 | | BH-10-23-3 | | - | - | 66% | | grey, medium | 97.00 | |
| 6 | | | | | | | | SILTY CLAY wet, grey | | |
| 7 | 2 | BH-10-23-4 | | - | - | 11% | | CAVE IN | | |
| 8 | | | | | | | | | 96.00 | |
| 9 | | BH-10-23-5 | | - | - | 11% | | | | |
| 10 | 3 | | | | | | | | | |
| 11 | | | | | | | | End of borehole at 3.1m bgs | 95.00 | |
| 12 | | | | | | | | | | |
| 13 | 4 | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | 94.00 | |

97.90m - 01/Oct/10



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

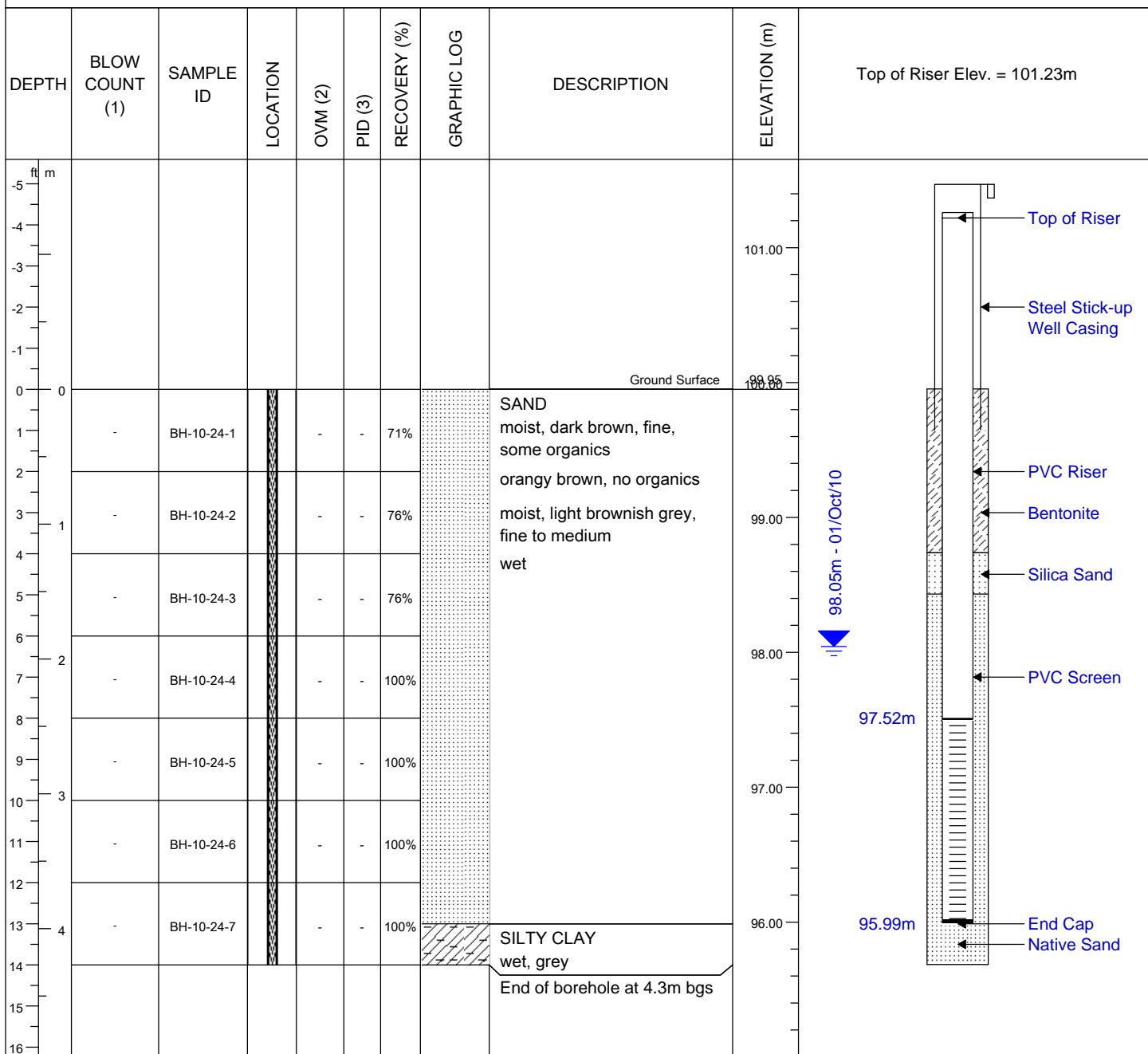
The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 29, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

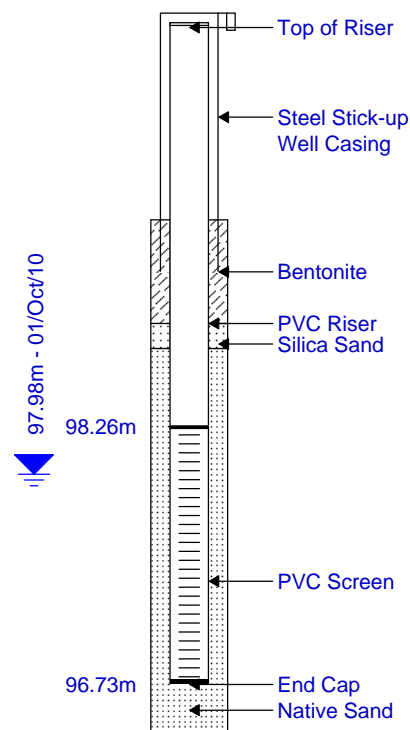
Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.



Sample submitted for laboratory analysis.

| | | |
|---|---|---|
| Project No.: 10-730 Client: National Capital Commission Location: Parking Lot 19, Leitrim Road Date Completed: September 29, 2010 Site Datum: SW corner of conc. slab on E side of gate. Assigned elev. of 100.00m | SLE Supervisor: Tina Stone Drilling Method: Direct Push Borehole Diameter: 57mm Monitoring Well Diameter: 38mm | Drilling Company: Strata Soil Sampling Drilling Equipment: Geoprobe 420 M Well Casing: 100mm Steel Stick Up (locked) Well Screen: PVC Schedule 40 Slot 10 OVM: N/A |
|---|---|---|

| DEPTH | BLOW COUNT (1) | SAMPLE ID | LOCATION | OVM (2) | PID (3) | RECOVERY (%) | GRAPHIC LOG | DESCRIPTION | ELEVATION (m) | Top of Riser Elev. = 100.65m |
|-------|----------------|------------|----------|---------|---------|--------------|-------------|---|---------------|------------------------------|
| ft m | | | | | | | | | | |
| -5 | | | | | | | | | | |
| -4 | | | | | | | | | | |
| -3 | | | | | | | | | | |
| -2 | | | | | | | | | | |
| -1 | | | | | | | | | | |
| 0 | | | | | | | | Ground Surface | 99.48 | |
| 1 | - | BH-10-25-1 | | - | - | 71% | | SAND moist, dark brown, fine, some organics | 99.00 | |
| 2 | | | | | | | | light grey | | |
| 3 | - | BH-10-25-2 | | - | - | 81% | | dark brown | | |
| 4 | | | | | | | | light brown | | |
| 5 | - | BH-10-25-3 | | - | - | 81% | | wet, light grey | 98.00 | |
| 6 | | | | | | | | trace gravel, trace coarse sand | | |
| 7 | - | BH-10-25-4 | | - | - | 100% | | | | |
| 8 | | | | | | | | | 97.00 | |
| 9 | - | BH-10-25-5 | | - | - | 100% | | SILTY CLAY wet, grey | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | End of borehole at 3.1m bgs | 96.00 | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |



(1) Blow count per 0.15 m using conventional hammer and split spoons
 (2) Organic Vapour Meter (OVM) reading (ppmv unless noted)
 (3) Photo Ionization Detector (PID) reading (ppmv)

The data represented in this borehole log requires interpretation by SNC-Lavalin Environment personnel. Third parties using this log do so at their own risk.

All elevations and locations are approximate.

Monitoring well equipped with dedicated inertial foot valve and polyethylene tubing for sampling.

◆ Sample submitted for laboratory analysis.

APPENDIX B

MOE WELL RECORD

Master Well Owner's and Land Owner's Information

First Name: Travis Hughes Last Name: National Capital Commission Business Address: 40-405
 Mailing Address (Street Number, Name, RR): 202-40 Elgin Street City/Town/Village: Ottawa Province: Ontario Postal Code: K1P1C7
 Location and Construction of the Master Well in the Cluster
 Address of Well Location (Street Number, Name, RR): Leitrim Road Township: Leitrim Lot: 3.19 Contention: WKQ-002951
 County/District/Municipality: Ottawa City/Town/Village: Ottawa Province: Ontario Postal Code:
 UTM Coordinates: NAD 83 1845587450 11683 Zone: 18N Easting: 587450 Northing: 11683 GPS Unit Make: ETEX Model: Mode of Operation:

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number, Name, RR): Leitrim Road Township: Leitrim Lot: 3.19 Contention: WKQ-002951
 County/District/Municipality: Ottawa City/Town/Village: Ottawa Province: Ontario Postal Code:

UTM Coordinates: NAD 83 1845587450 11683 Zone: 18N Easting: 587450 Northing: 11683 GPS Unit Make: ETEX Model: Mode of Operation:

Overburden and Bedrock Materials (see instructions on the back of this form)
 General Colour: Brown Most Common Material: SAND Other Materials: SILT General Description: WELL Depth (Meters) From: 0 To: 6
 General Colour: Grey Most Common Material: CLAY Other Materials: SILT General Description: SEALANT Depth (Meters) From: 6 To: 8

Hole Details

| Depth (Meters) | Diameter (Centimetres) |
|----------------|------------------------|
| 0 - 2 | 2.25 |
| 2 - 6 | |
| 6 - 8 | |

Water Use

| | | | |
|-------------------------------------|-------------------------------------|---|--|
| <input type="checkbox"/> Public | <input type="checkbox"/> Industrial | <input type="checkbox"/> Not Used | <input type="checkbox"/> Other, specify: |
| <input type="checkbox"/> Domestic | <input type="checkbox"/> Commercial | <input type="checkbox"/> Dewatering | |
| <input type="checkbox"/> Livestock | <input type="checkbox"/> Municipal | <input type="checkbox"/> Monitoring | |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Test Hole | <input type="checkbox"/> Cooling & Air Conditioning | |

Method of Construction

| | | |
|--|---|--|
| <input type="checkbox"/> Cable Tool | <input type="checkbox"/> Air Percussion | <input type="checkbox"/> Digging |
| <input type="checkbox"/> Rotary (Conventional) | <input type="checkbox"/> Diamond | <input type="checkbox"/> Boring |
| <input type="checkbox"/> Rotary (Reverse) | <input type="checkbox"/> Jetting | <input type="checkbox"/> Other, specify: |
| <input type="checkbox"/> Rotary (Air) | <input type="checkbox"/> Drilling | <u>Drill And</u> |

Status of Well

| | |
|---|--|
| <input type="checkbox"/> Test Hole | <input type="checkbox"/> Abandoned - Insufficient Supply |
| <input type="checkbox"/> Replacement Well | <input type="checkbox"/> Abandoned - Poor Water Quality |
| <input type="checkbox"/> Dewatering Well | <input type="checkbox"/> Other, specify: |
| <input type="checkbox"/> Abandon (Construction) | <input type="checkbox"/> Abandoned - other, specify: |

No Casing and Screen Used

| | | | |
|-----------|-----|----|-------|
| Open Hole | Yes | No | Other |
|-----------|-----|----|-------|

Screen

| | | | | |
|--------------------------------|-------|------------|----------|---------|
| Gravelized | Steel | Fiberglass | Concrete | Plastic |
| Outside Diameter (Centimetres) | 1.5 | | | 11 |

Water Details

| Water found at Depth | Kind of Water |
|----------------------|---------------|
| Meters | Gas |
| Water found at Depth | Kind of Water |
| Meters | Gas |
| Water found at Depth | Kind of Water |
| Meters | Gas |

Disinfected: ☐ Yes ☐ No. If no, provide reason: Date Master Well Completed
August 13, 2010

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

| | | |
|------------------------------|---|---|
| Total Wells in Cluster | 6 | Please indicate Number of Cluster Well Information Log Sheets Submitted |
| Total Wells on this Property | 1 | |

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
☐ Check box to confirm detailed map is provided as per Section 11.1 (2)

Consent to release additional information concerning the cluster to the Director upon request

| | |
|------------------------------------|-----------------|
| Signature of Technician/Contractor | Date (yy/mm/dd) |
|------------------------------------|-----------------|

Master Well Owner's/Land Owner's consent to use Cluster Form

| | |
|-----------|-----------------|
| Signature | Date (yy/mm/dd) |
|-----------|-----------------|

Ministry Use Only

| | |
|---------|--------------------|
| Auth No | Well Contractor No |
|---------|--------------------|

| | |
|--------------------------|-------------------------------|
| Date Received (yy/mm/dd) | Date of Inspection (yy/mm/dd) |
|--------------------------|-------------------------------|

| |
|---------|
| Remarks |
|---------|

Construction Details

| Material | Wall Thickness | Depth (Meters) |
|---|----------------|----------------|
| steel, plastic, fiberglass, concrete, grout, etc. | | From |
| 1.25' | 2.00' | 0.00' |

Annular Space/Abandonment Sealing Record

| Depth Set at | Type of Sealant Used | Volume Used |
|--------------|----------------------|----------------|
| From To | (Material and Type) | (Cubic Metres) |

General contractor: SNC-Lavalin Engineers &

Well Contractor and Well Technician Information

| | |
|----------------------------------|------------------------------|
| Business Name of Well Contractor | Well Contractor's License No |
|----------------------------------|------------------------------|

| | |
|--|----------|
| Business Address (Street No, Name, number, RR) | Locality |
|--|----------|

| | | |
|----------|-------------|------------------------|
| Province | Postal Code | Business Email Address |
|----------|-------------|------------------------|

| | |
|--|-----------|
| Business Name of Well Technician (Last Name, First Name) | Year 2010 |
|--|-----------|

| | | |
|------------------------------|-------------------------|---------------------------|
| Well Technician's License No | Signature of Technician | Date Submitted (yy/mm/dd) |
|------------------------------|-------------------------|---------------------------|

| | | |
|-------|--|--|
| 20109 | | |
|-------|--|--|

Master Well Owner's and Land Owner's Information

Address: National Capital Commission
202-40 Elgin St. Ottawa ON K1P1C7

Location and Construction of the Master Well in the Cluster

Address of Well Location: 202-40 Elgin St. Ottawa ON K1P1C7

County/City/Township

Latitude: 45.4222
Longitude: -75.6972

Province: Ontario

UTM Coordinates: Zone: 18, Easting: 83, Northing: 5908502

GPS Unit: Garmin

Depth of Construction: 10.0m

Overburden and Bedrock Materials (see instructions on the back of this form)

| General | Major Common | Other | General | Depth | Material |
|----------|--------------|----------|-------------|-------|----------|
| Comments | Material | Material | Description | From | To |
| | Brown Sand | Silt | Dark | 0.3 | 2.8 |
| | Gray Clay | | Soft | 2.8 | 3.0 |

Hole Details

| From | To | Depth | Material |
|------|-----|-------|----------|
| 0.3 | 3.0 | 5.5 | |

Water Use

| | | | |
|-------------------------------------|-------------------------------------|---|---------------------------------|
| <input type="checkbox"/> Potable | <input type="checkbox"/> Irrigation | <input type="checkbox"/> Industrial | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Domestic | <input type="checkbox"/> Commercial | <input type="checkbox"/> Manufacturing | |
| <input type="checkbox"/> Livestock | <input type="checkbox"/> Mining | <input type="checkbox"/> Power Generation | |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Other: | <input type="checkbox"/> Cooling & Air Conditioning | |

Method of Construction

| | | |
|--|-----------------------------------|--|
| <input type="checkbox"/> Open Pit | <input type="checkbox"/> Air Lift | <input type="checkbox"/> Drilling |
| <input type="checkbox"/> Rotary Construction | <input type="checkbox"/> Casing | <input type="checkbox"/> Boring |
| <input type="checkbox"/> Pump Jack | <input type="checkbox"/> Jetting | <input type="checkbox"/> Chemical Grouting |
| <input type="checkbox"/> Other: | <input type="checkbox"/> Other: | |

Status of Well

| | |
|---|--|
| <input type="checkbox"/> Active Well | <input type="checkbox"/> Abandoned (In-situ) |
| <input type="checkbox"/> Existing Well | <input type="checkbox"/> New Well |
| <input type="checkbox"/> Existing Well | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Abandoned (Construction) | <input type="checkbox"/> Other: |

No Casing and Screen Used

Static Water Level Test

| Yes | No | Static |
|-----|----|--------|
| | | |

Water Details

| Water found at Depth | Kind of Water | Flow | Depth | Flow |
|----------------------|---------------|------|-------|------|
| 0.3 | Fresh | 0.5 | 1.0 | 0.5 |
| 1.0 | Fresh | 0.5 | 1.0 | 0.5 |
| 1.5 | Fresh | 0.5 | 1.0 | 0.5 |

Annular Space/Abandonment Sealing Record

| Depth (m) | Material | Type of Sealant Used | Volume (L) |
|-----------|-----------|----------------------|------------|
| 0.3 | Bentonite | | |
| 1.5 | Sand | | |

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster)

| | |
|----------------------------|-------------------|
| Total Wells in Cluster: 10 | Parcel Number: 10 |
| Total Wells in Cluster: 10 | Parcel Number: 10 |

Location of Well Cluster

Cluster Map must be provided as an attachment no larger than legal size (5 x 14"). Symbols are not allowed.

Consent to release additional information concerning the cluster to the Director upon request

Signature of Technician/Contractor: [Signature] Date: 10/10/2010

Master Well Owner's/Land Owner's consent to use Cluster Form

Signature: [Signature] Date: 10/10/2010

Ministry Use Only

Well Contractor No. M 07752

Well Contractor Name: [Name]

Well Contractor Address: [Address]

Well Contractor Phone: [Phone]

Well Contractor Email: [Email]

Well Contractor and Well Technician Information

Business Name of Well Contractor: Streets & Sons (Sons) Inc.

Business Address (Street No., Name, Number, RR): 1000 Main Street, Ottawa, ON K1P1C7

Province: ON, Postal Code: K1P1C7, Business Email Address: [Email]

Bus/Telephone No./Mobile Cell No./Name of Well Technician (Last Name, First Name): [Name]

Well Contractor License No.: [License No.] Signature of Technician: [Signature]

Well Contractor Signature: [Signature] Date: 10/10/2010

Contractor's Copy



Ministry of
the Environment

Well Tag No. for Master Well (Print Well Tag No.)

A10-230

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 2 of 4

Property Owner's Information

| | | | |
|----------------------|------------------------|--|--------------------------------|
| First Name Donald | Last Name Capelli | Mailing Address (Street No./Name, RR) 202-4000 St. J. | Municipality Oshawa |
| Province Ontario | Postal Code L1P 1K1 | E-mail Address | Telephone No. (inc. area code) |

Cluster Well Information

| | | | | | |
|--|---------------------|-------------|-------------------------|-----------------|--|
| Address of Well Location (Street Number/Name, RR) 202-4000 St. J. | | Lot | Concession | Township | County/District/Municipality WQ-003073 |
| City/Town/Village | Province Ontario | Postal Code | GPS Unit Make Garmin | Model E-Trex | Unit Mode of Operation <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged |

Consent

Property Owner's Consent to use cluster form

Signature _____ Date (yyyy/mm/dd)

Consent to release additional information to the Director upon request

Signature of Technician/Contractor _____ Date (yyyy/mm/dd)

| Well # no. sketch | UTM Coordinates | | Full Depth of Hole (metres) | Hole Diameter (cm) | Method of Construction | Casing Material | Casing Length (metres) | Screen Interval (metres) | | Annular Space Sealant Used | Static Water Level (metres) | Abandonment Sealant Used | Comments | Date of Completion (yyyy/mm/dd) |
|----------------------|-----------------|--------------|--------------------------------|-----------------------|---------------------------|-----------------|---------------------------|--------------------------|----|-------------------------------|--------------------------------|-----------------------------|----------|------------------------------------|
| | Zone | Easting | | | | | | From | To | | | | | |
| 10-13 | 84 | 571450210 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-14 | 84 | 571655021600 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-15 | 84 | 571655021705 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-16 | 84 | 571675021700 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-17 | 84 | 571615021727 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-18 | 84 | 571655021735 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-19 | 84 | 571655021737 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-20 | 84 | 571655021660 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |
| 10-21 | 84 | 571655021670 | 3 | 5.5 | PVC | PVC | 1.5 | 1.5 | 3 | Basal | | | | 2010/09/28 |

Well Contractor and Well Technician Information

| | | | | | |
|---|---|--|--|--|---------------------|
| Business Name of Well Contractor CLUSTER CONSTRUCTION INC. | | Business Address (Street Number/Name, RR) 202-4000 St. J. | | Municipality Oshawa | Province Ontario |
| Postal Code L1P 1K1 | Business Telephone No. (inc. area code) 709-944-1111 | Well Contractor's Licence No. 31443 | | Business E-mail Address info@clustercon.com | |
| Name of Well Technician (First Name, Last Name) Mike Muir | | Well Technician's Licence No. 31443 | | Date Submitted (yyyy/mm/dd) 2010/10/10 | |

Date 1st Well in Cluster Constructed (yyyy/mm/dd) 2010/09/28
Date Last Well in Cluster Constructed (yyyy/mm/dd) 2010/09/28

Ministry Use Only

Date Received (yyyy/mm/dd) _____ Date Inspected (yyyy/mm/dd) _____
Audit No. 12438
Remarks _____

APPENDIX C

REGULATORY CRITERION SELECTION

APPENDIX C - REGULATORY CRITERIA SELECTION

Regulatory criteria have been selected as part of previous investigations completed at the site (Aqua Terre, 2008 and 2009). The following site specific information and assumptions were used to determine the applicable criteria for soil and groundwater:

- The site is owned by the NCC, therefore both federal and provincial regulatory criteria were considered.
- The property land use at the site has been classified as parkland.
- The site would not be considered an environmentally sensitive area as defined by Section 41 of Ontario Regulation 153/04 because:
 - The site is not, does not include, is not immediately adjacent to and is not part of an area of natural significance;
 - Laboratory analysis of pH in soil have not been conducted, however pH levels are assumed to be within the of 5 to 9 (native surface soil, <1.5 m bgs) and 5 to 11 range (subsurface soil, >1.5 m bgs);
 - The site is not considered a shallow soil property since more than 2/3 of the site has more than 2 m of overburden (Appendix A and Aqua Terre, 2008 and 2009); and,
 - The property does not include nor is it adjacent to a water body, nor does it include land that is within 30 m of a water body.
- The full depth restoration option will be used.
- Restoration of groundwater to potable levels is required since:
 - At the time of the 2000 Environmental Site Assessment (Aqua Terre, 2000), municipal drinking water was not provided to the area; however, based on drive-by inspection of existing residents and businesses located along the south side of Leitrim Road, it was evident that municipal water supply is currently supplied by a municipal drinking-water system as defined in the Safe Drinking Water Act, 2002 (supply source: Ottawa River). Subsequent review of on-line City of Ottawa mapping indicated that the properties along the south side of Leitrim Road are indeed within the City of Ottawa's water distribution system Public Service Area. Notwithstanding the above, it was also evident during the drive-by inspection that some properties along Leitrim Road still have water supply wells. Although residences in the vicinity of the site, along Leitrim Road currently have access to municipal water, it could not be confirmed whether all properties located, in whole or in part, within 100 metres of the boundaries of the property, have tied into the water main.
- The site soils have been classified as coarse textured since at least one-third of the soil at the property, measured by volume, consists of medium sand that is assumed to

contain more than 50 percent by mass of particles that are 75 µm or larger in mean diameter (Appendix A and Aqua Terre, 2008 and 2009).

Federal Guidelines

Based on the above information, soil and groundwater analytical results have historically been compared to the following federal criteria:

- Canadian Council of Ministers of the Environment (CCME) "Canadian Environmental Quality Guidelines", Chapter 2 - Community Water Supplies, (CCME, 1998, as updated); and,
- CCME "Canadian Environmental Quality Guidelines", Chapter 7 - Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, Residential/Parkland land use, coarse textured soils (CCME, 1999, as updated).

Although the above CCME guideline for community water supplies is not intended to be applied to source waters, based on the assumption that advanced treatment technologies are available, groundwater sources of drinking water in Ontario are typically not permitted to be used unless they are free of chemical contaminants, such as TCE.

The CCME is the primary source of federal guidelines for contaminated sites in Canada; however, the CCME have not developed guidelines for the protection of groundwater resources in a non-potable situation. In 2010, Environment Canada released the Federal Interim Groundwater Quality Guidelines (FIGQG) for the assessment, remediation or risk management of contaminated groundwater at federal sites. Although these guidelines have been previously introduced as Interim Guidelines, NCC has specified that they are to be applied at federal sites until Canadian groundwater quality guidelines are available (Meridian, 2010).

Following the FIGQG guidance provided for the selection of guidelines, current groundwater analytical results were compared to the following federal guidelines:

- "Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites", Table 2 Federal Interim Groundwater Quality Guidelines, Generic Guidelines for Residential/Parkland Land Use, Tier 1 Lowest Guideline for coarse textured soils (Meridian, 2010).

Provincial Standards

The following provincial site condition standards were previously selected from the Ontario Ministry of the Environment "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (MOE, 2004) using the approach described by Ontario Regulation 153/04 (O. Reg. 153/04):

- Ontario Ministry of the Environment (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (O. Reg. 153/04) Table 3: Full Depth Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soils (MOE, 2004).

APPENDIX D

LABORATORY CERTIFICATES OF ANALYSIS – SOIL SAMPLES

Your Project #: 10-730
Your C.O.C. #: E411386

Attention: Steve Wegner

SNC Lavalin
110 - 20 Colonnade Road
Suite 200
Ottawa, ON
CANADA K2E 7M6

Report Date: 2011/03/11

Report #: NM-333557

This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B047291

Received: 2010/09/09, 9:00

Sample Matrix: SOIL
Samples Received: 1

| Analyses | Quantity | Date Extracted | Date Analyzed | Laboratory Method | Primary reference |
|----------------------------|----------|-------------------|------------------|-------------------|-------------------|
| Volatile Organic Compounds | 1 | 2010/09/09 | 2010/09/09 | STL SOP-00145/11 | MA. 400 - COV 1.1 |
| Disposal Charges | 1 | N/A | 2010/09/09 | | |

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

KARIMA DLIMI, B.Sc., Chemist, Project manager assistant
Email: KDlimi@maxxam.ca
Phone# (514) 448-9001

=====

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

Maxxam Job #: B047291
Report Date: 2011/03/11

SNC Lavalin
Client Project #: 10-730

VOC BY GC/MS (SOIL)

| | | | | | | | |
|---------------|-------|---|---|---|------------|-----|----------|
| Maxxam ID | | | | | L60017 | | |
| Sampling Date | | | | | 2010/08/26 | | |
| COC Number | | | | | E411386 | | |
| | Units | A | B | C | BH-10-15-5 | RDL | QC Batch |

| | | | | | | | |
|----------------------------------|-------|-----|-----|-----|------|-----|--------|
| % Moisture | % | - | - | - | 18 | N/A | N/A |
| VOLATILES | | | | | | | |
| Benzene | mg/kg | 0.1 | 0.5 | 5 | <0.1 | 0.1 | 795954 |
| Chlorobenzene | mg/kg | 0.2 | 1 | 10 | <0.2 | 0.2 | 795954 |
| 1,2-Dichlorobenzene | mg/kg | 0.2 | 1 | 10 | <0.2 | 0.2 | 795954 |
| 1,3-Dichlorobenzene | mg/kg | 0.2 | 1 | 10 | <0.2 | 0.2 | 795954 |
| 1,4-Dichlorobenzene | mg/kg | 0.2 | 1 | 10 | <0.2 | 0.2 | 795954 |
| Ethylbenzene | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Styrene | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Toluene | mg/kg | 0.2 | 3 | 30 | <0.2 | 0.2 | 795954 |
| Total_Xylenes | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Chloroform | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Vinyl chloride | mg/kg | 0.4 | 0.4 | 0.4 | <0.2 | 0.2 | 795954 |
| 1,1-Dichloroethane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,2-Dichloroethane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,1-Dichloroethylene | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,2-Dichloroethylene (cis+trans) | mg/kg | 0.2 | 5 | 50 | <0.1 | 0.1 | 795954 |
| Dichloromethane | mg/kg | - | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,2-Dichloropropane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,3-Dichloropropane (cis+trans) | mg/kg | 0.2 | 5 | 50 | <0.1 | 0.1 | 795954 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Tetrachloroethylene | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Carbon Tetrachloride | mg/kg | 0.1 | 5 | 50 | <0.1 | 0.1 | 795954 |
| 1,1,1-Trichloroethane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| 1,1,2-Trichloroethane | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Trichloroethylene | mg/kg | 0.2 | 5 | 50 | <0.2 | 0.2 | 795954 |
| Surrogate Recovery (%) | | | | | | | |
| 4-Bromofluorobenzene | % | - | - | - | 106 | N/A | 795954 |
| D10-Ethylbenzene | % | - | - | - | 92 | N/A | 795954 |
| D4-1,2-Dichloroethane | % | - | - | - | 99 | N/A | 795954 |
| D8-Toluene | % | - | - | - | 97 | N/A | 795954 |

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

Maxxam Job #: B047291
Report Date: 2011/03/11

SNC Lavalin
Client Project #: 10-730

GENERAL COMMENTS

Condition of sample(s) upon receipt: GOOD

All results are calculated on a dry weight basis except where not applicable.

A,B,C: Criteria following appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". For all metals analyses in soil, the criterion A refers to " Background Level of St. Lawrence Lowlands Sector ".

For groundwaters:

The A and B criteria follow the appendix 2 of the " Soil Protection and Contaminated Sites Rehabilitation Policy " entitled " Generic criteria for soils and groundwater ". The criterion A refers to " Drinking Water " and the criterion B refers to "Seepage into Surface Water or Infiltration into Sewers ".

These criteria references are shown for visual aid only, and should not be interpreted otherwise.

- = This parameter is not part of the regulation.

VOC BY GC/MS (SOIL)

Please note that the results have not been corrected for QC recoveries (spiked blank and method blank) nor for the surrogates.

Please note that the samples were analyzed by Purge and Trap GC/MS. Reference method MA.400-VOC1.1.

This report supersedes all previous reports with the same Maxxam job number

Results relate only to the items tested.

SNC Lavalin
Attention: Steve Wegner
Client Project #: 10-730
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: B047291

| QA/QC Batch Num Init | QC Type | Parameter | Date Analyzed yyyy/mm/dd | Value | Recovery | Units |
|----------------------------|--------------|----------------------------------|--------------------------------|-------|----------|-------|
| 795954 FF | Spiked Blank | 4-Bromofluorobenzene | 2010/09/09 | | 106 | % |
| | | D10-Ethylbenzene | 2010/09/09 | | 90 | % |
| | | D4-1,2-Dichloroethane | 2010/09/09 | | 100 | % |
| | | D8-Toluene | 2010/09/09 | | 96 | % |
| | | Benzene | 2010/09/09 | | 90 | % |
| | | Chlorobenzene | 2010/09/09 | | 84 | % |
| | | 1,2-Dichlorobenzene | 2010/09/09 | | 91 | % |
| | | 1,3-Dichlorobenzene | 2010/09/09 | | 89 | % |
| | | 1,4-Dichlorobenzene | 2010/09/09 | | 84 | % |
| | | Ethylbenzene | 2010/09/09 | | 87 | % |
| | | Styrene | 2010/09/09 | | 97 | % |
| | | Toluene | 2010/09/09 | | 86 | % |
| | | Total_Xylenes | 2010/09/09 | | 90 | % |
| | | Chloroform | 2010/09/09 | | 78 | % |
| | | Vinyl chloride | 2010/09/09 | | 127 | % |
| | | 1,1-Dichloroethane | 2010/09/09 | | 98 | % |
| | | 1,2-Dichloroethane | 2010/09/09 | | 94 | % |
| | | 1,1-Dichloroethylene | 2010/09/09 | | 127 | % |
| | | 1,2-Dichloroethylene (cis+trans) | 2010/09/09 | | 87 | % |
| | | Dichloromethane | 2010/09/09 | | 111 | % |
| | | 1,2-Dichloropropane | 2010/09/09 | | 96 | % |
| | | 1,3-Dichloropropene (cis+trans) | 2010/09/09 | | 89 | % |
| | | 1,1,2,2-Tetrachloroethane | 2010/09/09 | | 102 | % |
| | | Tetrachloroethylene | 2010/09/09 | | 120 | % |
| | | Carbon Tetrachloride | 2010/09/09 | | 70 | % |
| | | 1,1,1-Trichloroethane | 2010/09/09 | | 91 | % |
| | | 1,1,2-Trichloroethane | 2010/09/09 | | 96 | % |
| | | Trichloroethylene | 2010/09/09 | | 95 | % |
| | Method Blank | 4-Bromofluorobenzene | 2010/09/09 | | 108 | % |
| | | D10-Ethylbenzene | 2010/09/09 | | 89 | % |
| | | D4-1,2-Dichloroethane | 2010/09/09 | | 100 | % |
| | | D8-Toluene | 2010/09/09 | | 96 | % |
| | | Benzene | 2010/09/09 | <0.1 | | mg/kg |
| | | Chlorobenzene | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,2-Dichlorobenzene | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,3-Dichlorobenzene | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,4-Dichlorobenzene | 2010/09/09 | <0.2 | | mg/kg |
| | | Ethylbenzene | 2010/09/09 | <0.2 | | mg/kg |
| | | Styrene | 2010/09/09 | <0.2 | | mg/kg |
| | | Toluene | 2010/09/09 | <0.2 | | mg/kg |
| | | Total_Xylenes | 2010/09/09 | <0.2 | | mg/kg |
| | | Chloroform | 2010/09/09 | <0.2 | | mg/kg |
| | | Vinyl chloride | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,1-Dichloroethane | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,2-Dichloroethane | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,1-Dichloroethylene | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,2-Dichloroethylene (cis+trans) | 2010/09/09 | <0.1 | | mg/kg |
| | | Dichloromethane | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,2-Dichloropropane | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,3-Dichloropropene (cis+trans) | 2010/09/09 | <0.1 | | mg/kg |
| | | 1,1,2,2-Tetrachloroethane | 2010/09/09 | <0.2 | | mg/kg |
| | | Tetrachloroethylene | 2010/09/09 | <0.2 | | mg/kg |
| | | Carbon Tetrachloride | 2010/09/09 | <0.1 | | mg/kg |
| | | 1,1,1-Trichloroethane | 2010/09/09 | <0.2 | | mg/kg |
| | | 1,1,2-Trichloroethane | 2010/09/09 | <0.2 | | mg/kg |

SNC Lavalin
 Attention: Steve Wegner
 Client Project #: 10-730
 P.O. #:
 Project name:

Quality Assurance Report (Continued)


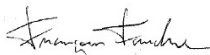
Maxxam Job Number: B047291

| QA/QC Batch | | | | Date Analyzed | | | |
|---|--------------|-------------------|--|------------------|-------|----------|-------|
| Num Init | QC Type | Parameter | | yyyy/mm/dd | Value | Recovery | Units |
| 795954 FF | Method Blank | Trichloroethylene | | 2010/09/09 | <0.2 | | mg/kg |
| <p>Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery. Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination. Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.</p> | | | | | | | |

Validation Signature Page

Maxxam Job #: B047291

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



FRANCOIS FAUCHER, B.Sc., Chemist,

=====

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

APPENDIX E

LABORATORY CERTIFICATES OF ANALYSIS - GROUNDWATER SAMPLES

Your Project #: 10-730
Your C.O.C. #: 20891101, 208911-0

Attention: Steve Wegner
SNC-Lavalin Environment
Nepean
20 Colonnade Rd, Suite 110
Ottawa, ON
K2E 7M6

Report Date: 2010/09/03

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0B7553
Received: 2010/08/27, 08:21

Sample Matrix: Water
Samples Received: 14

| Analyses | Quantity | Date Extracted | Date Analyzed | Laboratory Method | Method Reference |
|---|----------|-------------------|------------------|-------------------|---------------------|
| Volatile Organic Compounds in Water (1) | 13 | N/A | 2010/08/30 | CAM SOP-00226 | EPA 8260 modified |
| Volatile Organic Compounds in Water (1) | 1 | N/A | 2010/09/03 | CAM SOP-00226 | EPA 8260 modified |

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
* Results relate only to the items tested.

(1) This test was performed by Maxxam Ottawa

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

JULIE CLEMENT, Ottawa Customer Service
Email: Julie.Clement@maxxamanalytics.com
Phone# (613) 274-3549

=====

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

Total cover pages: 1

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | GY6664 | GY6665 | GY6666 | GY6667 | GY6668 | GY6669 | GY6670 | GY6671 | | |
|-------------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/08/26 10:00 | 2010/08/26 10:20 | 2010/08/26 10:40 | 2010/08/26 11:10 | 2010/08/26 11:50 | 2010/08/26 12:10 | 2010/08/26 12:35 | 2010/08/26 12:55 | | |
| | Units | DP-10-23 | DP-10-24 | DP-10-25 | DP-10-26 | DP-10-27 | DP-10-28 | DP-10-29 | DP-10-30 | RDL | QC Batch |
| Volatile Organics | | | | | | | | | | | |
| Dichlorodifluoromethane (FREON 12) | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Hexane | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Acetone (2-Propanone) | ug/L | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 2248445 |
| Benzene | ug/L | 0.6 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.7 | 0.1 | 2248445 |
| Bromodichloromethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Bromoform | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Bromomethane | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Carbon Tetrachloride | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Chlorobenzene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Chloroform | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Dibromochloromethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,2-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,3-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,4-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1-Dichloroethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 0.2 | 0.1 | 2248445 |
| 1,2-Dichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1-Dichloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| cis-1,2-Dichloroethylene | ug/L | 3.4 | 0.2 | <0.1 | <0.1 | <0.1 | <0.1 | 9.1 | 1.5 | 0.1 | 2248445 |
| trans-1,2-Dichloroethylene | ug/L | 0.4 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 3.2 | 0.4 | 0.1 | 2248445 |
| 1,2-Dichloropropane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| cis-1,3-Dichloropropene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| trans-1,3-Dichloropropene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Ethylbenzene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Ethylene Dibromide | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Methylene Chloride(Dichloromethane) | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Methyl Isobutyl Ketone | ug/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 5 | 2248445 |
| Methyl Ethyl Ketone (2-Butanone) | ug/L | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 5 | 2248445 |
| Methyl t-butyl ether (MTBE) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Styrene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1,1,2-Tetrachloroethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Tetrachloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Toluene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1,1-Trichloroethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | GY6664 | GY6665 | GY6666 | GY6667 | GY6668 | GY6669 | GY6670 | GY6671 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/08/26 10:00 | 2010/08/26 10:20 | 2010/08/26 10:40 | 2010/08/26 11:10 | 2010/08/26 11:50 | 2010/08/26 12:10 | 2010/08/26 12:35 | 2010/08/26 12:55 | | |
| | Units | DP-10-23 | DP-10-24 | DP-10-25 | DP-10-26 | DP-10-27 | DP-10-28 | DP-10-29 | DP-10-30 | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Trichloroethylene | ug/L | 19 | 0.6 | <0.1 | <0.1 | <0.1 | 0.6 | 47 | 32 | 0.1 | 2248445 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| p+m-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| o-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Xylene (Total) | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Surrogate Recovery (%) | | | | | | | | | | | |
| 4-Bromofluorobenzene | % | 104 | 104 | 104 | 108 | 104 | 107 | 104 | 107 | | 2248445 |
| D4-1,2-Dichloroethane | % | 113 | 117 | 117 | 118 | 118 | 118 | 119 | 119 | | 2248445 |
| D8-Toluene | % | 97 | 94 | 95 | 97 | 95 | 96 | 95 | 97 | | 2248445 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | GY6672 | GY6673 | GY6685 | GY6686 | GY6687 | GY6688 | | |
|-------------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/08/26 14:30 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | | |
| | Units | DP-10-31 | DP-10-33 | DP-10-34 | DP-10-99 | DP-10-35 | RINSE BLANK | RDL | QC Batch |
| Volatile Organics | | | | | | | | | |
| Dichlorodifluoromethane (FREON 12) | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Hexane | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Acetone (2-Propanone) | ug/L | <10 | <10 | <10 | <10 | <10 | <10 | 10 | 2248445 |
| Benzene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Bromodichloromethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Bromoform | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Bromomethane | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Carbon Tetrachloride | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Chlorobenzene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Chloroform | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Dibromochloromethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,2-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,3-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,4-Dichlorobenzene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1-Dichloroethane | ug/L | 0.2 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| 1,2-Dichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1-Dichloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| cis-1,2-Dichloroethylene | ug/L | 0.1 | <0.1 | 0.1 | 0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| trans-1,2-Dichloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| 1,2-Dichloropropane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| cis-1,3-Dichloropropene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| trans-1,3-Dichloropropene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Ethylbenzene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Ethylene Dibromide | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Methylene Chloride(Dichloromethane) | ug/L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | 2248445 |
| Methyl Isobutyl Ketone | ug/L | <5 | <5 | <5 | <5 | <5 | <5 | 5 | 2248445 |
| Methyl Ethyl Ketone (2-Butanone) | ug/L | <5 | <5 | <5 | <5 | <5 | <5 | 5 | 2248445 |
| Methyl t-butyl ether (MTBE) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Styrene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1,1,2-Tetrachloroethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Tetrachloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Toluene | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| 1,1,1-Trichloroethane | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | GY6672 | GY6673 | GY6685 | GY6686 | GY6687 | GY6688 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/08/26 14:30 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | 2010/08/26 15:50 | | |
| | Units | DP-10-31 | DP-10-33 | DP-10-34 | DP-10-99 | DP-10-35 | RINSE BLANK | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Trichloroethylene | ug/L | 0.1 | 3.7 | 5.1 | 4.3 | <0.1 | <0.1 | 0.1 | 2248445 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| p+m-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| o-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Xylene (Total) | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2248445 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2248445 |
| Surrogate Recovery (%) | | | | | | | | | |
| 4-Bromofluorobenzene | % | 105 | 105 | 105 | 107 | 103 | 119 | | 2248445 |
| D4-1,2-Dichloroethane | % | 118 | 115 | 119 | 122 | 119 | 84 | | 2248445 |
| D8-Toluene | % | 96 | 96 | 96 | 95 | 94 | 92 | | 2248445 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

| | |
|-----------|-------|
| Package 1 | 8.7°C |
|-----------|-------|

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

Sample GY6688-01: VOC Analysis:
Due to foaming sample required dilution. The DLs were adjusted accordingly.

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

QUALITY ASSURANCE REPORT

| QC Batch | Parameter | Date | Matrix Spike | | Spiked Blank | | Method Blank | | RPD | |
|----------|------------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | Units | Value (%) | QC Limits |
| 2248445 | 4-Bromofluorobenzene | 2010/08/30 | 106 | 70 - 130 | 105 | 70 - 130 | 99 | % | | |
| 2248445 | D4-1,2-Dichloroethane | 2010/08/30 | 101 | 70 - 130 | 99 | 70 - 130 | 98 | % | | |
| 2248445 | D8-Toluene | 2010/08/30 | 102 | 70 - 130 | 101 | 70 - 130 | 100 | % | | |
| 2248445 | Dichlorodifluoromethane (FREON 12) | 2010/08/30 | 97 | 60 - 140 | 69 | 60 - 140 | <0.5 | ug/L | NC | 40 |
| 2248445 | Hexane | 2010/08/30 | 96 | 70 - 130 | 99 | 70 - 130 | <0.5 | ug/L | NC | 40 |
| 2248445 | Acetone (2-Propanone) | 2010/08/30 | 89 | 60 - 140 | 82 | 60 - 140 | <10 | ug/L | NC | 40 |
| 2248445 | Benzene | 2010/08/30 | 86 | 70 - 130 | 99 | 70 - 130 | <0.1 | ug/L | 17.2 | 40 |
| 2248445 | Bromodichloromethane | 2010/08/30 | 105 | 70 - 130 | 107 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Bromoform | 2010/08/30 | 113 | 70 - 130 | 110 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Bromomethane | 2010/08/30 | NC | 60 - 140 | 76 | 60 - 140 | <0.5 | ug/L | NC | 40 |
| 2248445 | Carbon Tetrachloride | 2010/08/30 | 118 | 70 - 130 | 120 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Chlorobenzene | 2010/08/30 | 104 | 70 - 130 | 107 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Chloroform | 2010/08/30 | 103 | 70 - 130 | 103 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Dibromochloromethane | 2010/08/30 | 108 | 70 - 130 | 107 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,2-Dichlorobenzene | 2010/08/30 | 105 | 70 - 130 | 111 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,3-Dichlorobenzene | 2010/08/30 | 104 | 70 - 130 | 110 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,4-Dichlorobenzene | 2010/08/30 | 103 | 70 - 130 | 111 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,1-Dichloroethane | 2010/08/30 | 104 | 70 - 130 | 96 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | 1,2-Dichloroethane | 2010/08/30 | 103 | 70 - 130 | 98 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,1-Dichloroethylene | 2010/08/30 | 101 | 70 - 130 | 99 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | cis-1,2-Dichloroethylene | 2010/08/30 | 101 | 70 - 130 | 95 | 70 - 130 | <0.1 | ug/L | 11.4 | 40 |
| 2248445 | trans-1,2-Dichloroethylene | 2010/08/30 | 93 | 70 - 130 | 94 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | 1,2-Dichloropropane | 2010/08/30 | 102 | 70 - 130 | 101 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | cis-1,3-Dichloropropene | 2010/08/30 | 104 | 70 - 130 | 102 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | trans-1,3-Dichloropropene | 2010/08/30 | 105 | 70 - 130 | 99 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Ethylbenzene | 2010/08/30 | 103 | 70 - 130 | 103 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Ethylene Dibromide | 2010/08/30 | 105 | 70 - 130 | 101 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | MethyleneChloride(Dichloromethane) | 2010/08/30 | 110 | 70 - 130 | 104 | 70 - 130 | <0.5 | ug/L | NC | 40 |
| 2248445 | Methyl Isobutyl Ketone | 2010/08/30 | 108 | 70 - 130 | 104 | 70 - 130 | <5 | ug/L | NC | 40 |
| 2248445 | Methyl Ethyl Ketone (2-Butanone) | 2010/08/30 | 97 | 60 - 140 | 97 | 60 - 140 | <5 | ug/L | NC | 40 |
| 2248445 | Methyl t-butyl ether (MTBE) | 2010/08/30 | 101 | 70 - 130 | 96 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Styrene | 2010/08/30 | 103 | 70 - 130 | 102 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,1,1,2-Tetrachloroethane | 2010/08/30 | 107 | 70 - 130 | 107 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | 1,1,2,2-Tetrachloroethane | 2010/08/30 | 108 | 70 - 130 | 104 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Tetrachloroethylene | 2010/08/30 | 108 | 70 - 130 | 106 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Toluene | 2010/08/30 | 102 | 70 - 130 | 102 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | 1,1,1-Trichloroethane | 2010/08/30 | 102 | 70 - 130 | 102 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | 1,1,2-Trichloroethane | 2010/08/30 | 105 | 70 - 130 | 99 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Trichloroethylene | 2010/08/30 | 103 | 70 - 130 | 101 | 70 - 130 | <0.1 | ug/L | 31.7 | 40 |
| 2248445 | Vinyl Chloride | 2010/08/30 | 81 | 70 - 130 | 74 | 70 - 130 | <0.2 | ug/L | NC | 40 |

Maxxam Job #: B0B7553
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

QUALITY ASSURANCE REPORT

| QC Batch | Parameter | Date | Matrix Spike | | Spiked Blank | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | Units | Value (%) | QC Limits |
| 2248445 | p+m-Xylene | 2010/08/30 | 104 | 70 - 130 | 107 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | o-Xylene | 2010/08/30 | 103 | 70 - 130 | 104 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2248445 | Trichlorofluoromethane (FREON 11) | 2010/08/30 | 97 | 70 - 130 | 95 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2248445 | Xylene (Total) | 2010/08/30 | | | | | <0.1 | ug/L | NC | 40 |

N/A = Not Applicable

RPD = Relative Percent Difference

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

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

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

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

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

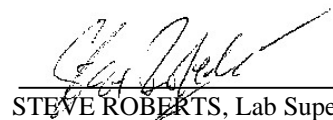
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Validation Signature Page

Maxxam Job #: B0B7553

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



STEVE ROBERTS, Lab Supervisor, Ottawa

=====

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

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD, AN INCOMPLETE CHAIN OF CUSTODY MAY BE USED IN ANALYTICAL TAT DELAYS. Page 10 of 11
Maxxim Analytics International Corporation d/b/a Maxxim Analytics

Your Project #: 10-730
Your C.O.C. #: 20891103, 208911-0

Attention: Steve Wegner
SNC-Lavalin Environment
Nepean
20 Colonnade Rd, Suite 110
Ottawa, ON
K2E 7M6

Report Date: 2010/09/03

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0B8000

Received: 2010/08/27, 14:28

Sample Matrix: Water
Samples Received: 9

| Analyses | Quantity | Date Extracted | Date Analyzed | Laboratory Method | Method Reference |
|---|----------|-------------------|------------------|-------------------|---------------------|
| Volatile Organic Compounds in Water (l) | 7 | N/A | 2010/09/02 | CAM SOP-00226 | EPA 8260 modified |
| Volatile Organic Compounds in Water (l) | 2 | N/A | 2010/09/03 | CAM SOP-00226 | EPA 8260 modified |

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

* Results relate only to the items tested.

(1) This test was performed by Maxxam Ottawa

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

JULIE CLEMENT, Ottawa Customer Service
Email: Julie.Clement@maxxamanalytics.com
Phone# (613) 274-3549

=====

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

Total cover pages: 1

Maxxam Job #: B0B8000
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | GY9187 | GY9188 | GY9189 | GY9190 | GY9191 | GY9192 | GY9193 | GY9194 | GY9195 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/08/27 13:10 | 2010/08/27 13:15 | 2010/08/27 13:35 | 2010/08/27 13:22 | 2010/08/27 13:40 | 2010/08/27 13:27 | 2010/08/27 13:15 | 2010/08/27 13:10 | 2010/08/27 13:22 | | |
| | Units | MW-09-8 | MW-09-9 | MW-10-10 | MW-10-15 | MW-10-11 | MW-10-12 | MW-10-13 | MW-10-14 | MW-10-99 | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2250065 |
| Trichloroethylene | ug/L | 13 | 0.2 | 4.0 | 2.0 | 4.9 | <0.1 | 17 | <0.1 | 2.1 | 0.1 | 2250065 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2250065 |
| p+m-Xylene | ug/L | <0.1 | <0.1 | 0.1 | <0.1 | 0.1 | 0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2250065 |
| o-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2250065 |
| Xylene (Total) | ug/L | <0.1 | <0.1 | 0.1 | <0.1 | 0.1 | 0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2250065 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2250065 |
| Surrogate Recovery (%) | | | | | | | | | | | | |
| 4-Bromofluorobenzene | % | 109 | 107 | 106 | 109 | 108 | 107 | 108 | 107 | 107 | | 2250065 |
| D4-1,2-Dichloroethane | % | 123 | 124 | 123 | 119 | 120 | 124 | 122 | 121 | 121 | | 2250065 |
| D8-Toluene | % | 96 | 95 | 96 | 95 | 95 | 94 | 96 | 96 | 96 | | 2250065 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0B8000
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

| | |
|-----------|--------|
| Package 1 | 17.7°C |
|-----------|--------|

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

Maxxam Job #: B0B8000
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

QUALITY ASSURANCE REPORT

| QC Batch | Parameter | Date | Matrix Spike | | Spiked Blank | | Method Blank | | RPD | |
|----------|------------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | Units | Value (%) | QC Limits |
| 2250065 | 4-Bromofluorobenzene | 2010/09/02 | 107 | 70 - 130 | 106 | 70 - 130 | 107 | % | | |
| 2250065 | D4-1,2-Dichloroethane | 2010/09/02 | 99 | 70 - 130 | 95 | 70 - 130 | 127 | % | | |
| 2250065 | D8-Toluene | 2010/09/02 | 97 | 70 - 130 | 99 | 70 - 130 | 95 | % | | |
| 2250065 | Dichlorodifluoromethane (FREON 12) | 2010/09/02 | 93 | 60 - 140 | 107 | 60 - 140 | <0.5 | ug/L | | |
| 2250065 | Hexane | 2010/09/02 | NC | 70 - 130 | 82 | 70 - 130 | <0.5 | ug/L | | |
| 2250065 | Acetone (2-Propanone) | 2010/09/02 | 81 | 60 - 140 | 84 | 60 - 140 | <10 | ug/L | NC | 40 |
| 2250065 | Benzene | 2010/09/02 | 78 | 70 - 130 | 83 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Bromodichloromethane | 2010/09/02 | 100 | 70 - 130 | 104 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Bromoform | 2010/09/02 | 90 | 70 - 130 | 95 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | Bromomethane | 2010/09/02 | NC | 60 - 140 | 76 | 60 - 140 | <0.5 | ug/L | NC | 40 |
| 2250065 | Carbon Tetrachloride | 2010/09/02 | 90 | 70 - 130 | 99 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Chlorobenzene | 2010/09/02 | 85 | 70 - 130 | 96 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Chloroform | 2010/09/02 | 78 | 70 - 130 | 84 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Dibromochloromethane | 2010/09/02 | 92 | 70 - 130 | 97 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,2-Dichlorobenzene | 2010/09/02 | 81 | 70 - 130 | 94 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,3-Dichlorobenzene | 2010/09/02 | 78 | 70 - 130 | 96 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,4-Dichlorobenzene | 2010/09/02 | 77 | 70 - 130 | 95 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,1-Dichloroethane | 2010/09/02 | 77 | 70 - 130 | 84 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | 1,2-Dichloroethane | 2010/09/02 | 94 | 70 - 130 | 92 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,1-Dichloroethylene | 2010/09/02 | 91 | 70 - 130 | 100 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | cis-1,2-Dichloroethylene | 2010/09/02 | 73 | 70 - 130 | 77 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | trans-1,2-Dichloroethylene | 2010/09/02 | 90 | 70 - 130 | 102 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | 1,2-Dichloropropane | 2010/09/02 | 95 | 70 - 130 | 97 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | cis-1,3-Dichloropropene | 2010/09/02 | 91 | 70 - 130 | 96 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | trans-1,3-Dichloropropene | 2010/09/02 | 93 | 70 - 130 | 96 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | Ethylbenzene | 2010/09/02 | 82 | 70 - 130 | 99 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Ethylene Dibromide | 2010/09/02 | 93 | 70 - 130 | 95 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | MethyleneChloride(Dichloromethane) | 2010/09/02 | 100 | 70 - 130 | 105 | 70 - 130 | <0.5 | ug/L | NC | 40 |
| 2250065 | Methyl Isobutyl Ketone | 2010/09/02 | 116 | 70 - 130 | 108 | 70 - 130 | <5 | ug/L | NC | 40 |
| 2250065 | Methyl Ethyl Ketone (2-Butanone) | 2010/09/02 | 98 | 60 - 140 | 93 | 60 - 140 | <5 | ug/L | NC | 40 |
| 2250065 | Methyl t-butyl ether (MTBE) | 2010/09/02 | 109 | 70 - 130 | 105 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | Styrene | 2010/09/02 | 86 | 70 - 130 | 99 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,1,1,2-Tetrachloroethane | 2010/09/02 | 92 | 70 - 130 | 96 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | 1,1,2,2-Tetrachloroethane | 2010/09/02 | 97 | 70 - 130 | 96 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | Tetrachloroethylene | 2010/09/02 | 82 | 70 - 130 | 100 | 70 - 130 | <0.1 | ug/L | 5.6 | 40 |
| 2250065 | Toluene | 2010/09/02 | 85 | 70 - 130 | 94 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | 1,1,1-Trichloroethane | 2010/09/02 | 80 | 70 - 130 | 86 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | 1,1,2-Trichloroethane | 2010/09/02 | 94 | 70 - 130 | 95 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2250065 | Trichloroethylene | 2010/09/02 | 90 | 70 - 130 | 100 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Vinyl Chloride | 2010/09/02 | 85 | 70 - 130 | 93 | 70 - 130 | <0.2 | ug/L | NC | 40 |

Maxxam Job #: B0B8000
Report Date: 2010/09/03

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

QUALITY ASSURANCE REPORT

| QC Batch | Parameter | Date | Matrix Spike | | Spiked Blank | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | Units | Value (%) | QC Limits |
| 2250065 | p+m-Xylene | 2010/09/02 | 84 | 70 - 130 | 103 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | o-Xylene | 2010/09/02 | 87 | 70 - 130 | 103 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2250065 | Trichlorofluoromethane (FREON 11) | 2010/09/02 | 92 | 70 - 130 | 103 | 70 - 130 | <0.2 | ug/L | | |
| 2250065 | Xylene (Total) | 2010/09/02 | | | | | <0.1 | ug/L | NC | 40 |

N/A = Not Applicable

RPD = Relative Percent Difference

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

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

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

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

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

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Validation Signature Page

Maxxam Job #: B0B8000

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



STEVE ROBERTS, Lab Supervisor, Ottawa

=====

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

Your Project #: 10-730
Your C.O.C. #: 21611001, 216110-01-01

Attention: Steve and Tina
SNC-Lavalin Environment
Nepean
20 Colonnade Rd, Suite 110
Ottawa, ON
K2E 7M6

Report Date: 2010/10/12

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0D9732
Received: 2010/10/01, 17:51

Sample Matrix: Water
Samples Received: 15

| Analyses | Quantity | Date Extracted | Date Analyzed | Laboratory Method | Method Reference |
|-------------------------------------|----------|-------------------|------------------|-------------------|---------------------|
| Volatile Organic Compounds in Water | 15 | N/A | 2010/10/09 | CAM SOP-00226 | EPA 8260 modified |

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
* Results relate only to the items tested.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

JULIE CLEMENT, Ottawa Customer Service
Email: JClement@maxxam.ca
Phone# (613) 274-3549

=====

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

Total cover pages: 1

Page 1 of 13

Maxxam Job #: B0D9732
Report Date: 2010/10/12

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | HJ9172 | HJ9173 | HJ9174 | HJ9175 | HJ9176 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/10/01 14:45 | 2010/10/01 14:50 | 2010/10/01 14:55 | 2010/10/01 15:00 | 2010/10/01 15:05 | | |
| | Units | MW-10-10 | MW-10-11 | MW-10-13 | MW-10-15 | MW-10-16 | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Trichloroethylene | ug/L | 4.0 | 5.4 | 14 | 2.1 | <0.1 | 0.1 | 2289421 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| p+m-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2289421 |
| o-Xylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2289421 |
| Xylene (Total) | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2289421 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Surrogate Recovery (%) | | | | | | | | |
| 4-Bromofluorobenzene | % | 95 | 95 | 94 | 94 | 96 | | 2289421 |
| D4-1,2-Dichloroethane | % | 111 | 110 | 110 | 109 | 111 | | 2289421 |
| D8-Toluene | % | 105 | 105 | 105 | 105 | 106 | | 2289421 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0D9732
Report Date: 2010/10/12

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | HJ9177 | HJ9178 | HJ9179 | HJ9180 | HJ9181 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/10/01 15:10 | 2010/10/01 15:15 | 2010/10/01 15:15 | 2010/10/01 15:20 | 2010/10/01 15:25 | | |
| | Units | MW-10-17 | MW-10-18 | MW-10-98 | MW-10-19 | MW-10-20 | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Trichloroethylene | ug/L | 5.5 | <0.1 | <0.1 | <0.1 | 0.1 | 0.1 | 2289421 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| p+m-Xylene | ug/L | 1.5 | 0.2 | 1.7 | 0.2 | 0.8 | 0.1 | 2289421 |
| o-Xylene | ug/L | 0.7 | <0.1 | 0.8 | 0.1 | 0.4 | 0.1 | 2289421 |
| Xylene (Total) | ug/L | 2.2 | 0.2 | 2.6 | 0.3 | 1.2 | 0.1 | 2289421 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Surrogate Recovery (%) | | | | | | | | |
| 4-Bromofluorobenzene | % | 96 | 96 | 98 | 93 | 96 | | 2289421 |
| D4-1,2-Dichloroethane | % | 110 | 110 | 110 | 105 | 110 | | 2289421 |
| D8-Toluene | % | 104 | 105 | 105 | 108 | 106 | | 2289421 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0D9732
Report Date: 2010/10/12

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

VOLATILE ORGANICS BY GC/MS (WATER)

| Maxxam ID | | HJ9182 | HJ9183 | HJ9184 | HJ9185 | HJ9186 | | |
|-----------------------------------|-------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|----------|
| Sampling Date | | 2010/10/01 15:20 | 2010/10/01 15:25 | 2010/10/01 15:15 | 2010/10/01 15:05 | 2010/10/01 15:30 | | |
| | Units | MW-10-21 | MW-10-22 | MW-10-23 | MW-10-24 | MW-10-25 | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Trichloroethylene | ug/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.1 | 2289421 |
| Vinyl Chloride | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| p+m-Xylene | ug/L | 0.3 | 0.5 | 0.3 | <0.1 | 0.6 | 0.1 | 2289421 |
| o-Xylene | ug/L | 0.1 | 0.2 | 0.1 | <0.1 | 0.3 | 0.1 | 2289421 |
| Xylene (Total) | ug/L | 0.5 | 0.7 | 0.4 | <0.1 | 0.9 | 0.1 | 2289421 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | 0.2 | 2289421 |
| Surrogate Recovery (%) | | | | | | | | |
| 4-Bromofluorobenzene | % | 96 | 95 | 96 | 95 | 95 | | 2289421 |
| D4-1,2-Dichloroethane | % | 109 | 109 | 111 | 110 | 110 | | 2289421 |
| D8-Toluene | % | 105 | 105 | 105 | 104 | 104 | | 2289421 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B0D9732
Report Date: 2010/10/12

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

| | |
|-----------|-------|
| Package 1 | 4.0°C |
|-----------|-------|

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

Maxxam Job #: B0D9732
Report Date: 2010/10/12

SNC-Lavalin Environment
Client Project #: 10-730

Sampler Initials: TS

QUALITY ASSURANCE REPORT

| QC Batch | Parameter | Date | Matrix Spike | | Spiked Blank | | Method Blank | | RPD | |
|----------|-----------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | Units | Value (%) | QC Limits |
| 2289421 | p+m-Xylene | 2010/10/09 | 93 | 70 - 130 | 96 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2289421 | o-Xylene | 2010/10/09 | 93 | 70 - 130 | 96 | 70 - 130 | <0.1 | ug/L | NC | 40 |
| 2289421 | Trichlorofluoromethane (FREON 11) | 2010/10/09 | 92 | 70 - 130 | 98 | 70 - 130 | <0.2 | ug/L | NC | 40 |
| 2289421 | Xylene (Total) | 2010/10/09 | | | | | <0.1 | ug/L | NC | 40 |

N/A = Not Applicable

RPD = Relative Percent Difference

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

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

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.

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

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

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) - The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

Validation Signature Page**Maxxam Job #: B0D9732**

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

EWA PRANJIC, M.Sc., CChem, Scientific Specialist

=====

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| | | | | | | | |
|-----------------------------|--|--|--|-----------------------------|------------------|-----------------------------|------------------|
| INVOICE INFORMATION: | | REPORT INFORMATION (if differs from invoice): | | PROJECT INFORMATION: | | Laboratory Use Only: | |
| Company Name: | #2033- SNC-Lavalin Environment | Company Name: | Steve and Tina | Quotation #: | B04762 | MAXXAM JOB #: | BOTTLE ORDER #: |
| Contact Name: | Steve and Tina | Contact Name: | Steve and Tina | P.O. #: | | | |
| Address: | 20 Colonnade Rd, Suite 110 Ottawa ON K2E 7M6 | Address: | | Project #: | 10-730 | | |
| Phone: | (613)226-2456 | Phone: | | Project Name: | | CHAIN OF CUSTODY #: | PROJECT MANAGER: |
| Fax: | (613)226-9980 | Fax: | | Site #: | | | |
| Email: | steve.wegner@snclavalin.com; tina.stone@snclavalin.com | Email: | steve.wegner@snclavalin.com; tina.stone@snclavalin.com | Sampled By: | Tina Stone/Kelly | | |

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| REGULATORY CRITERIA: | | SPECIAL INSTRUCTIONS: | | ANALYSIS REQUESTED (Please be specific): | | TURNAROUND TIME (TAT) REQUIRED: | |
| <input type="checkbox"/> MISA <input type="checkbox"/> PWQO <input type="checkbox"/> Reg. 558 <input checked="" type="checkbox"/> Reg. 153/04 <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Table 6 <input type="checkbox"/> Residential/Parkland <input type="checkbox"/> Industrial/Commercial <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Coarse <input type="checkbox"/> Other (specify) <u>CCME</u> Report Criteria on C of A? <input type="checkbox"/> | | Sewer Use <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm <input type="checkbox"/> Combined Municipality _____ Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form | | Regulated Drinking Water? (Y/N) _____ Metals Field Filtered? (Y/N) _____ Volatile Organic Compounds in Water _____ | | PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS Regular (Standard) TAT: _____ (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) _____ Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #) | |

| Sample Barcode Label | Sample (Location) Identification | Date Sampled | Time Sampled | Matrix | Regulated Drinking Water? (Y/N) | Metals Field Filtered? (Y/N) | Volatile Organic Compounds in Water | Analysis Requested | # of Bottles | Comments |
|----------------------|----------------------------------|---------------------|-----------------|--------|---------------------------------|------------------------------|-------------------------------------|--------------------|--------------|----------|
| 1 | MW-10-21 | 11/10/10 | 3 ²⁰ | GW | N | N | X | | 3 | |
| 2 | MW-10-22 | 11/10/10 | 3 ²⁵ | GW | N | N | X | | 3 | |
| 3 | MW-10-23 | 11/10/10 | 3 ¹⁵ | GW | N | N | X | | 3 | |
| 4 | MW-10-24 | 11/10/10 | 3 ⁰⁵ | GW | N | N | X | | 3 | |
| 5 | MW-10-25 | 11/10/10 | 3 ³⁰ | GW | N | N | X | | 3 | |
| 6 | | 11/10/10 | | GW | | | | | | |
| 7 | | 11/10/10 | | GW | | | | | | |
| 8 | | | | GW | | | | | | |
| 9 | | | | GW | | | | | | |
| 10 | | | | GW | | | | | | |

| | | | | | | | | | | |
|--|--|-------------------------|--------------|---------------------------------------|--|-------------------------|--------------|------------------------|----------------------------|--|
| *RELINQUISHED BY: (Signature/Print) | | Date: (YY/MM/DD) | Time: | RECEIVED BY: (Signature/Print) | | Date: (YY/MM/DD) | Time: | # Jars Used and | Laboratory Use Only | |
| Tina Stone | | 10/10/01 | 6PM | Jessica | | 10/10/01 | 17:51 | Not Submitted | Time Sensitive | Temperature (°C) on Receipt |
| | | | | | | 20/10/05 | 8:45 | | <input type="checkbox"/> | 54.3 |
| | | | | | | | | | | Custody Seal Intact on Cooler? |
| | | | | | | | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

Maxxam Analytics International Corporation o/a Maxxam Analytics

APPENDIX F

QUALITY ASSURANCE AND QUALITY CONTROL

TABLE F.1 FIELD RPD CALCULATIONS
Groundwater Samples - Drivepoints
NCC Property Asset No. 97390, Leitrim Road,

| SNC-Lavalin Environment Sample No. | | RPD Alert Limits | DP-10-34 | RDL | DP-10-99 Field Duplicate of DP-10-34 | RDL | RPD |
|------------------------------------|-------|------------------------|------------------|-----|---|-----|-----|
| | Units | | | | | | |
| <i>Laboratory Sample No.</i> | na | na | <i>GY6685</i> | na | <i>GY6686</i> | na | na |
| <i>Sampling Date</i> | na | na | <i>26-Aug-10</i> | na | <i>26-Aug-10</i> | na | na |
| <i>Monitoring Well No.</i> | na | na | <i>DP-10-34</i> | na | <i>DP-10-34</i> | na | na |
| Dichlorodifluoromethane (FREON 12) | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Hexane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Acetone | µg/L | 30% | < | 10 | < | 10 | nc |
| Benzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromodichloromethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromoform | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Bromomethane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Carbon Tetrachloride | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chlorobenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chloroform | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Dibromochloromethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,2-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,3-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,4-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,2-Dichloroethylene | µg/L | 30% | 0.1 | 0.1 | 0.1 | 0.1 | nc |
| trans-1,2-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloropropane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| trans-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Ethylbenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Ethylene Dibromide | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Methylene Chloride | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Methyl Isobutyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl Ethyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl t-butyl ether | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Styrene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1,1,2-Tetrachloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2,2-Tetrachloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Tetrachloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Toluene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1,1-Trichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2-Trichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Trichloroethylene | µg/L | 30% | 5.1 | 0.1 | 4.3 | 0.1 | 17% |
| Vinyl Chloride | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| p+m-Xylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| o-Xylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Xylene (Total) | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Trichlorofluoromethane (FREON 11) | µg/L | 30% | < | 0.2 | < | 0.2 | nc |

RDL reportable detection limit
< less than RDL
RPD Relative Percent Difference
nc RPD not calculable (when one or both results are equal to or less than 5X RDL)
na not applicable
µg/L micrograms per litre
BOLD Exceeds alert limit
¹ United States Environmental Protection Agency (USEPA), 1996. "Region I, EPA- New England Data Validation Functional Guidelines for Evaluating Environmental Analyses," December

TABLE F.2 FIELD RPD CALCULATIONS
Groundwater Samples - Monitoring Wells
NCC Property Asset No. 97390, Leirtrim Road, Ottawa, ON

| SNC-Lavalin Environment Sample No. | | | MW-10-15 | RDL | MW-10-99 Field Duplicate of MW-10-15 | RDL | RPD |
|------------------------------------|-------|------------------------|-----------------|-----|---|-----|-----|
| | Units | RPD Alert Limits | | | | | |
| <i>Laboratory Sample No.</i> | na | na | <i>HJ9175</i> | na | <i>HJ9195</i> | na | na |
| <i>Sampling Date</i> | na | na | <i>1-Oct-10</i> | na | <i>1-Oct-10</i> | na | na |
| <i>Monitoring Well No.</i> | na | na | <i>MW-10-15</i> | na | <i>MW-10-15</i> | na | na |
| Dichlorodifluoromethane (FREON 12) | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Hexane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Acetone | µg/L | 30% | < | 10 | < | 10 | nc |
| Benzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromodichloromethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromoform | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Bromomethane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Carbon Tetrachloride | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chlorobenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chloroform | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Dibromochloromethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,2-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,3-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,4-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,2-Dichloroethylene | µg/L | 30% | 0.3 | 0.1 | 0.3 | 0.1 | nc |
| trans-1,2-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloropropane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| trans-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Ethylbenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Ethylene Dibromide | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Methylene Chloride | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Methyl Isobutyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl Ethyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl t-butyl ether | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Styrene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1,1,2-Tetrachloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2,2-Tetrachloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Tetrachloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Toluene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1,1-Trichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2-Trichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Trichloroethylene | µg/L | 30% | 2.0 | 0.1 | 2.1 | 0.1 | 5% |
| Vinyl Chloride | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| p+m-Xylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| o-Xylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Xylene (Total) | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Trichlorofluoromethane (FREON 11) | µg/L | 30% | < | 0.2 | < | 0.2 | nc |

RDL reportable detection limit
< less than RDL
RPD Relative Percent Difference
nc RPD not calculable (when one or both results are equal to or less than 5X RDL)
na not applicable
µg/L micrograms per litre
BOLD Exceeds alert limit
¹ United States Environmental Protection Agency (USEPA), 1996. "Region I, EPA- New England Data Validation Functional Guidelines for Evaluating Environmental Analyses." December 1996.

TABLE F.2 FIELD RPD CALCULATIONS
Groundwater Samples - Monitoring Wells
NCC Property Asset No. 97390, Leirtrim Road, Ottawa, ON

| SNC-Lavalin Environment Sample No. | | | MW-10-18 | RDL | MW-10-98 | RDL | RPD |
|------------------------------------|-------|------------------|-----------------|-----|-----------------------------|-----|-----|
| | Units | RPD Alert Limits | | | Field Duplicate of MW-10-18 | | |
| <i>Laboratory Sample No.</i> | na | na | <i>HJ9178</i> | na | <i>HJ9179</i> | na | na |
| <i>Sampling Date</i> | na | na | <i>1-Oct-10</i> | na | <i>1-Oct-10</i> | na | na |
| <i>Monitoring Well No.</i> | na | na | <i>MW-10-18</i> | na | <i>MW-10-18</i> | na | na |
| Dichlorodifluoromethane (FREON 12) | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Hexane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Acetone | µg/L | 30% | < | 10 | < | 10 | nc |
| Benzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromodichloromethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Bromoform | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Bromomethane | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Carbon Tetrachloride | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chlorobenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Chloroform | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Dibromochloromethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,2-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,3-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,4-Dichlorobenzene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,2-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| trans-1,2-Dichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,2-Dichloropropane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| cis-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| trans-1,3-Dichloropropene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Ethylbenzene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Ethylene Dibromide | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Methylene Chloride | µg/L | 30% | < | 0.5 | < | 0.5 | nc |
| Methyl Isobutyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl Ethyl Ketone | µg/L | 30% | < | 5 | < | 5 | nc |
| Methyl t-butyl ether | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Styrene | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| 1,1,1,2-Tetrachloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2,2-Tetrachloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Tetrachloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Toluene | µg/L | 30% | < | 0.2 | 1.7 | 0.2 | nc |
| 1,1,1-Trichloroethane | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| 1,1,2-Trichloroethane | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| Trichloroethylene | µg/L | 30% | < | 0.1 | < | 0.1 | nc |
| Vinyl Chloride | µg/L | 30% | < | 0.2 | < | 0.2 | nc |
| p+m-Xylene | µg/L | 30% | 0.2 | 0.1 | 1.7 | 0.1 | nc |
| o-Xylene | µg/L | 30% | < | 0.1 | 0.8 | 0.1 | nc |
| Xylene (Total) | µg/L | 30% | 0.2 | 0.1 | 2.6 | 0.1 | nc |
| Trichlorofluoromethane (FREON 11) | µg/L | 30% | < | 0.2 | < | 0.2 | nc |

RDL reportable detection limit
< less than RDL
RPD Relative Percent Difference
nc RPD not calculable (when one or both results are equal to or less than 5X RDL)
na not applicable
µg/L micrograms per litre
BOLD Exceeds alert limit
¹ United States Environmental Protection Agency (USEPA), 1996. "Region I, EPA- New England Data Validation Functional Guidelines for Evaluating Environmental Analyses." December 1996.



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